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ABSTRACT

Compiled are abstracts and indexes to selected print and non-print materials related to wastewater treatment and water quality education and instruction, as well as materials related to pesticides, hazardous wastes, and public participation. Sources of abstracted/indexed materials include all levels of government, private concerns, and educational institutions. Title, author(s), publication date, cross-references, descriptors, and availability are provided for each entry. Also included are procedures to illustrate how instructors and curriculum developers in the water quality control field can locate instructional materials to meet the very general or highly specific requirements of their programs. This publication supplements and does not replace "Water Quality Instructional Resources Information System (IRIS): A Compilation of Abstracts to Water Quality and Water Resources" or IRIS supplements 1-22. (JN)

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ED265039

Prepared by

Environmental Quality Instructional Resources Center
SMEAC Information Reference Center
The Ohio State University
1200 Chambers Road, Room 310
Columbus, OH 43212

WATER QUALITY INSTRUCTIONAL RESOURCES INFORMATION SYSTEM (IRIS)

A Compilation of Abstracts to Water Quality and Water Resources Materials

Supplement 23 (1985)

SE 046 339

October 1985

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Robert W. Howe

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

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Preface

This publication contains abstracts and indexes to selected materials related to wastewater treatment and water quality education and instruction. In addition, some materials related to pesticides, hazardous wastes, and public participation are included. Also included are procedures to illustrate how instructors and curriculum developers in the water quality control field can locate instructional materials to meet very general or highly specific requirements in their programs.

Supplements to this publication will be issued periodically.

For further information about these materials contact:

Environmental Quality Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212

(614) 422-6717

I. General Information about Materials in IRIS.

A. What types of materials are included in IRIS?

The Environmental Quality Instructional Resources Center acquires, reviews, indexes, and announces both print (books, modules, units, etc.) and non-print (films, slides, video tapes, etc.) materials related to water quality and water resources education and instruction.

Materials selected must be available from some source for announcement. When materials are not readily available we attempt to make the materials available through some national information service for easier acquisition. In a few cases the Environmental Quality Instructional Resources Center is the source of the materials.

B. How are materials entered into IRIS?

We request that people assist us in locating materials for the system. If you have materials you believe to be useful to others, please send two copies if possible to the:

Environmental Quality (EQ) Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212

Materials are reviewed by the project staff. Availability of the materials is checked, and the materials are abstracted and indexed. The abstract describes the contents of the material. The index terms (descriptors) are concepts or terms used to describe the contents and the form of the document. (See the Subject Index for a listing of those that have been used.) The index terms are useful for locating materials manually, such as with this supplement, and also by computer.

When items are processed they are entered on the IRIS (water) computer tape. This tape is maintained by the EQ Instructional Resources Center at The Ohio State University and is used for producing tapes for other information systems, publications, and for computer searches conducted at The Ohio State University.

C. How can a user locate materials in IRIS?

1. All materials placed in IRIS (water) collection.

Materials entered into the IRIS (water) collection can be located in two ways: (1) by manual search of the 1983 compilation and supplements that follow and (2) by computer.

The compilation produced in 1983 includes the original IRIS (1979) and Supplements 1-15. It is available for $75.00.

Quarterly updates of the compilation are available by subscription on a yearly basis. Information regarding an annual subscription to IRIS (water) Quarterly Compilations can be obtained by writing to the EQ Instructional Resources Center. A subscription to the quarterly supplements for 1985 is $12.00 (within the U.S.). Price to Canada and Mexico is $14.00. Prices in other Countries is $18.00. Separate quarterly supplements are $5.00 each.

The compilation and the quarterly supplements can be scanned and the subject index can be used for manual searches.

Computer tapes of the IRIS (water) collection can also be searched. The IRIS tapes are available for searching at The Ohio State University and will again be available for computer searching at other sites in the future.

2. Materials placed in the Educational Resources Information System (ERIC)

A number of the materials processed for the IRIS (water) system are entered into the ERIC system and announced in Resources in Education (RIE). Resources in Education (RIE) is published monthly and is available from:

Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783-3238

The current price is listed in the most recent issue of RIE. Check if a college or university library close to you has a copy. If they do not, contact the EQ Instructional Resources Center for assistance.

Many libraries subscribe to RIE. Materials announced in RIE can be searched manually each month by scanning RIE or by checking the index terms in the back of each issue. Materials announced in RIE can be searched by computer also. ERIC computer tapes may be purchased outright, but users can access them through Dialog, BRS, CompuServe and Systems Development Corporation (Orbit). For the address of search services in your state that can search these databases, contact the:

EQ Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212
(614) 422-6717

Most of the materials announced in RIE are available on microfiche (microfilm) at over 700 sites throughout the United States and the world. Users can view these materials on site at many locations to identify what they believe will be useful to them at no cost. Microfiche copies (or in most cases Xerox copies) can be ordered through the ERIC Document Reproduction Service. The address and order information is in the back of each issue of RIE. Xerox copies of many items related to water quality and resource education and training can also be ordered through the EQ Instructional Resources Center for $0.06 per page plus $1.00 per document.

For information about locations of ERIC microfiche sites in your state, contact the EQ Instructional Resources Center.

A number of journal articles processed for the IRIS (water) system are entered into the ERIC system and announced in Current Index to Journals in Education (CIJE).

Current Index to Journals in Education is published monthly and is available from:

ORYX Press
2214 North Central at Encanto
Phoenix, Arizona 85004
(602) 254-6156

Many libraries subscribe to CIJE. Materials announced in CIJE can be searched manually each month by scanning CIJE or by checking the index terms in the back of each issue. Materials announced in CIJE can be searched by computer also. Refer to the previous discussion of RIE concerning computer searches.

Materials announced in CIJE can be located in journals at many university libraries.

Many of the articles can be obtained from University Microfilms. For prices and further information write to:

UMI Article Reprint Department
300 North Zeeb Road
Ann Arbor, Michigan 48106
(800) 521-0600

II. How to Use the Compilation

A. Description of Information in Resumes

Each resume is listed by EW number in numerical order in the resume section. Two samples of resumes are provided to explain the data fields in the resumes. Sample resume #1 is a sample resume of an item not entered into ERIC. Sample resume #2 is a sample resume of an item entered into ERIC; a few additional data elements are in these resumes and are explained.

1. Sample resume of materials not entered in ERIC

a. IRIS NUMBER: EW006023
b. PUBLICATION DATE: FEB 81
c. TITLE: PROGRAMMED APPROACH TO WATER/MASS ANALYSES.
d. PERSONAL AUTHOR: SPENCE, GEORGE R., JR.
e. DESCRIPTOR: *DESIGN; *ENGINEERING; *EQUIPMENT; *MASS BALANCE; *PROJECT DESIGN; *POLLUTION ENGINEERING; *PIPES; *WATER RESOURCES

f. DESCRIPTIVE NOTE: 30-33P.
g. ABSTRACT: DURING THE ENGINEERING PHASE OF A PROJECT DESIGN, WATER REQUIREMENTS OFTEN CHANGE AS NEW INFORMATION BECOMES AVAILABLE. THIS ARTICLE DETAILS A PROGRAMMED APPROACH TO CALCULATION OF A WATER/MASS BALANCE WHICH PROVIDES THE USER WITH THE ABILITY TO READILY ASSESS THE IMPACT OF VARYING WATER QUALITIES, FLOW PATTERNS, AND FLOW RATES. THIS INFORMATION IS THEN USED IN DETERMINING PIPE AND EQUIPMENT SIZES.

h. AVAILABILITY: POLLUTION ENGINEERING; V13 N2

a. IRIS NUMBER -- this is the identification number sequentially assigned to materials as they are processed. Gaps in numbers mean that some items have been deleted, are being processed to add new information, or have been delayed in processing for some reason.

b. PUBLICATION DATE -- date material was published according to information on the material.

c. TITLE

d. PERSONAL AUTHOR -- person or persons who wrote, compiled, or edited the material. Up to two personal authors can be listed.

e. DESCRIPTOR -- subject terms which characterize substantive contents and form of the materials. The major terms are preceeded by an asterisk. Terms used to index all resumes in this compilation can be reviewed in the Subject Index.

f. DESCRIPTIVE NOTE -- various items of information may be contained in this section. For print materials the number of pages is usually listed. The price of the material quoted is the last time information was received from the source. Please note: Prices of nearly all materials are subject to changes and may not be accurate at the time a person orders a specific item.

g. ABSTRACT -- some early materials entered into IRIS did not have abstract information. All materials currently being entered into IRIS have an informative abstract that describes the contents of the item.

h. AVAILABILITY -- information in this field indicates where the material can be obtained.

2. Sample resume of material entered into ERIC (Resources in Education).

Items entered into ERIC (Resources in Education) will have a few additional data fields. See letter references "a" and "b" below.

IRIS ACCESSION NUMBER: EW006664
PUBLICATION DATE: 80
TITLE: RESOURCE DEVELOPMENT OF WATERSHED LANDS: A SIX WEEK SHORT COURSE.
DESCRIPTOR: ADMINISTRATION; ECOLOGICAL FACTORS; ECONOMIC FACTORS; INSTRUCTIONAL MATERIALS; *LAND USE; NATURAL RESOURCES; *POST SECONDARY EDUCATION; *TECHNICAL EDUCATION; *WATER RESOURCES; HYDROLOGY; NATURAL RESOURCES MANAGEMENT; WATER QUALITY; *WATERSHEDS

b. DESCRIPTIVE NOTE: EDRS PRICE: MF01 PLUS POSTAGE-NOT AVAILABLE IN HARD COPY DUE TO MARGINAL LEGIBILITY OF ORIGINAL DOCUMENT.

ABSTRACT: THIS COURSE WAS DESIGNED TO PROVIDE THE WATER RESOURCE TECHNICIAN OR MANAGER WITH INFORMATION WHICH WILL AID IN THE IMPLEMENTATION OF IMPROVEMENTS OF PRESENT LAND USE PRACTICES AND TO ILLUSTRATE ALTERNATIVE CONCEPTS AND TECHNIQUES IN LAND AND WATER USE FOR INCREASING AND IMPROVING THE MULTIPLE PRODUCTS OF WATERSHED LANDS. (ED 197 941)

a. AVAILABILITY: ERIC DOCUMENT REPRODUCTION SERVICE, P. O. BOX 190, ARLINGTON, VA 22210

a. ERIC NUMBER -- the ED number indicates the document has been processed and entered into Resources in Education. This identification number is the number to use when ordering a document or when requesting information about a document.

b. EDRS PRICE -- if material is available through the ERIC Document Reproduction Service, the price of the material when it was entered into the ERIC system and the form of the material is indicated. "MF" means microfiche; "HC" means Xerox copy. Prices are subject to change. Current prices of microfiche and paper copies are listed in the back of each issue of Resources in Education; consult the latest monthly issue for current prices. Information about ordering items can be obtained by contacting:

ERIC Document Reproduction Service (EDRS)
3900 Wheeler Avenue
Alexandria, VA 22304

1-800-227-3742

Items that are available on microfiche (MF) are contained in microfiche collections at over 700 sites where they can be read. For information on the microfiche locations in your state contact the EQ Instructional Resources Center.

B. How to Locate Desired Materials

Users can identify materials of interest by scanning the resume listings, or using the Subject Index or Author Index.

1. Subject Index

The Subject Index is designed to enable the user to search for information on either a broad subject or a narrow information concern. An EW number is included for each item listed under the subject heading. The EW number refers to the abstract entry in the resume section where complete bibliographic information, an abstract of the item, and availability information can be found.

A user can also coordinate a search by checking EW numbers that appear under two or more subject headings. For example, you could check all the EW numbers under Water Treatment and all the EW numbers under Films. EW numbers included under both subject headings would include information relevant to Water Treatment that were films. EW numbers under wastewater treatment and laboratory techniques would provide a list of materials related to Laboratory Techniques and to Wastewater Treatment. Similar techniques could be used to identify other information desired.

Users with ERIC microfiche should check the resume entry. If the document is available on microfiche from the ERIC Document Reproduction Service, the availability will be indicated by "MF" on the resume by "EDRS Price." This means libraries with ERIC microfiche collections should have the document on microfiche.

If you want a document available through the ERIC Document Reproduction Service (EDRS) see the section on ordering documents.

2. Author Index

If you desire to locate a document by the name of the author, you can use the Author Index. EW numbers are provided under the author in the Author Index as in the Subject Index. Some documents do not have a listed author; hence, they are not listed in this index.

III. Correcting an Existing IRIS Record

The IRIS data base will be updated on a quarterly basis. Corrections will be made to the data base at those times. You can help improve IRIS by sending corrections for items you find to be in error.

We request that you duplicate (copy) the resume from the compilation, mark the information you believe to be wrong (or incomplete), and send the marked resume to:

EQ Instructional Resources Center
1200 Chambers Road, Room 310
Columbus, Ohio 43212
(614) 422-6717

Corrections of errors will occur in the IRIS tapes at the next update after comments are received.

If you have difficulty obtaining materials from the listed source in the AVAILABILITY section of the resume, please let us know. We will contact the sources to verify whether the materials are available, but your assistance will provide corrections between annual availability checks.

If you are the supplier of materials in IRIS, please let us know if you remove a product from your list, modify a product on your list, or change the price of the product.

IV. Requests to Receive Information about IRIS and the IRC Bulletin

Information regarding IRIS, materials in IRIS, and modifications in the system will be announced in the IRC Bulletin. The Bulletin is issued about four times a year as information is available.

If you are not on the mailing list write to the EQ Instructional Resources Center for subscription information.

If you need information about IRIS you can also phone (614) 422-6717 with your questions.

V. Requests for Assistance in Using IRIS

If you need help in using the IRIS manuals, phone (614) 422-6717 or write to the EQ Instructional Resources Center. Staff are normally available from about 8:30 a.m. to 4:30 p.m. Eastern time to answer your questions.

VI. How to Locate Other Relevant Educational Materials

A number of people have requested information related to such areas as management, basic skills (reading, mathematics, writing) human relations, contract negotiations, and other topics. The EQ Instructional Resources Center has developed or obtained some materials in these areas.

Another excellent source of information for many educational concerns is the ERIC System.

ERIC is a national information system designed and developed by the U.S. Office of Education, and now supported and operated by the National Institute of Education (NIE), for providing ready access to descriptions of exemplary programs, research and development efforts, and related information that can be used in developing more effective educational programs.

There are 16 Clearinghouses in the nationwide ERIC network. Each specializes in a different, multi-discipline, educational area. Each searches out pertinent documents.

The ERIC Clearinghouses have responsibility within the network for acquiring the significant educational literature within their particular areas, selecting the highest quality and most relevant material, processing (i.e., cataloging, indexing, abstracting) the selected items for input to the data base, and also for providing information analysis products and various user services based on the data base.

The 16 ERIC Clearinghouses are listed on the next few pages, together with addresses, telephone numbers, and brief scope notes describing the areas they cover. You can contact them for assistance in locating information relevant to their scope notes.

A. ERIC Clearinghouse on Adult, Career, and Vocational Education
The Ohio State University
National Center for Research in Vocational Education
1960 Kenny Road
Columbus, Ohio 43210
Telephone: (614) 486-3655

Career education, formal and informal at all levels, encompassing attitudes, self-knowledge, decision-making skills, general and occupational knowledge, and specific vocational and occupational skills; adult and continuing education, formal and informal, relating to occupational, family, leisure, citizen, organizational, and retirement roles; vocational and technical education, including new sub-professional fields, industrial arts, and vocational rehabilitation for the handicapped.

B. ERIC Clearinghouse on Counseling and Personnel Services
University of Michigan
School of Education, Room 2108
Ann Arbor, Michigan 48109
Telephone: (313) 764-9492

Preparation, practice, and supervision of counselors at all educational levels and in all settings, theoretical development of counseling and guidance, use and results of personnel procedures such as testing, interviewing, disseminating, and analyzing such information, group work and case work; nature of pupil, student, and adult characteristics; personnel workers and their relation to career planning, family consultations, and student orientation activities.

C. ERIC Clearinghouse on Elementary and Early Childhood Education
University of Illinois
College of Education
805 West Pennsylvania Avenue
Urbana, Illinois 61801
Telephone: (217) 333-1386

Prenatal factors, parental behavior; the physical, psychological, social, educational, and cultural development of children from birth through the primary grades; educational theory, research and practice related to the development of young children.

D. ERIC Clearinghouse on Educational Management
University of Oregon
Library, Room 108
1787 Agate Street
Eugene, Oregon 97403
Telephone: (503) 686-5043

Leadership, management, and structure of public and private educational organizations; practice and theory of administration; preservice and inservice preparation of administrators, tasks and processes of administration, methods and varieties of organization, organizational change, and social context of the organization.

Sites, buildings, and equipment for education; planning, financing, constructing, renovating, equipping, maintaining, operating, insuring, utilizing, and evaluating educational facilities.

E. ERIC Clearinghouse on Handicapped and Gifted Children
Council for Exceptional Children
1920 Association Drive
Reston, Virginia 22091
Telephone: (703) 620-3660

Aurally handicapped, visually handicapped, mentally handicapped, physically handicapped, emotionally disturbed, speech handicapped, learning disabilities, and the gifted; behavioral, psychomotor, and communication disorders, administration of special education services; preparation and continuing education of professional and paraprofessional personnel; preschool learning and development of the exceptional; general studies on creativity.

F. ERIC Clearinghouse on Higher Education
George Washington University
One Dupont Circle, NW, Suite 630
Washington, DC 20036
Telephone: (202) 296-2597

Various subjects relating to college and university students, college and university conditions and problems, college and university programs; curricular and instructional problems and programs, faculty, institutional research; federal programs, professional education (medical, law, etc.), graduate education, university extension programs, teaching-learning, planning, governance, finance, evaluation, interinstitutional arrangements, and management of higher educational institutions.

G. ERIC Clearinghouse on Information Resources
Syracuse University
School of Education
Huntington Hall, Room 030
150 Marshall Street
Syracuse, New York 13210
Telephone: (315) 423-3640

Management, operation, and use of libraries; the technology to improve their operation and the education, training, and professional activities of librarians and information specialists. Educational techniques involved in microteaching, systems analysis, and programmed instruction employing audiovisual teaching aids and technology, such as television, radio, computers, and cable television, communication satellites, microforms, and public television.

H. ERIC Clearinghouse for Junior Colleges
University of California at Los Angeles (UCLA)
Mathematical Sciences Building, Room 8118
405 Hilgard Avenue
Los Angeles, California 90024
Telephone: (213) 825-3931

Development, administration, and evaluation of public and private community junior colleges. Junior college students, staff, curricula, programs, libraries, and community services.

I. ERIC Clearinghouse on Languages and Linguistics
Center for Applied Linguistics
1118 "22nd" Street, NW
Washington, DC 20037
Telephone: (202) 429-9292

Languages and linguistics. Instructional methodology, psychology of language learning, cultural and intercultural content, application of linguistics, curricular problems and developments, teacher training and qualifications, language sciences, psycholinguistics, theoretical and applied linguistics, language pedagogy, bilingualism, and commonly taught languages including English and speakers of other languages.

J. ERIC Clearinghouse on Reading and Communication Skills
National Council of Teacher of English
1111 Kenyon Road
Urbana, Illinois 61801
Telephone: (217) 328-3870

Reading, English, and communication skills, preschool through college. Educational research and development in reading, writing, speaking, and listening. Identification, diagnosis, and remediation of reading problems. Speech communication--forensics, mass communication, interpersonal and small group interaction, interpretation, rhetorical and communication theory, instruction development, speech sciences, and theater. Preparation of instructional staff and related personnel in these areas.

All aspects of reading behavior with emphasis on physiology, psychology, sociology, and teaching. Instructional materials, curricula, tests and measurement, preparation of reading teachers and specialists, and methodology at all levels. Role of libraries and other agencies in fostering and guiding reading. Diagnostic and remedial services in school and clinical settings.

K. ERIC Clearinghouse on Rural Education and Small Schools
New Mexico State University
Box 3AP
Las Cruces, New Mexico 88003
Telephone: (505) 646-2623

Education of Indian Americans, Mexican Americans, Spanish Americans, and migratory farm workers and their children; outdoor education; economic, cultural, social, or other factors related to educational programs in rural areas and small schools; disadvantaged of rural and small school populations.

L. ERIC Clearinghouse for Science, Mathematics and Environmental Education
The Ohio State University
1200 Chambers Road - Room 310
Columbus, Ohio 43212
Telephone: (614) 422-6717

All levels of science, mathematics, and environmental education; development of curriculum and instructional materials; media applications; impact of interest, intelligence, values, and concept development upon learning; preservice and inservice teacher education and supervision.

M. ERIC Clearinghouse for Social Studies/Social Science Education
Social Science Education Consortium, Inc.
855 Broadway
Boulder, Colorado 80302
Telephone: (303) 492-8434

All levels of social studies and social science; all activities relating to teachers; content of disciplines; applications of learning theory, curriculum theory, child development theory, and instructional theory; research and development programs; special needs of student groups; education as a social science; social studies/social science and the community.

N. ERIC Clearinghouse on Teacher Education
American Association of Colleges for Teacher Education (AACTE)
One Dupont Circle, NW, Suite 610
Washington, DC 20036
Telephone: (202) 293-2450

School personnel at all levels, all issues from selection through preservice and inservice preparation and training to retirement; curricula, educational theory and philosophy; general education not specifically covered by Educational Management Clearinghouse; Title XI NDEA Institutes not covered by subject speciality in other ERIC Clearinghouses; all aspects of physical education.

O. ERIC Clearinghouse on Tests, Measurement, and Evaluation
Educational Testing Service (ETS)
Rosedale Road
Princeton, New Jersey 08541
Telephone: (609) 734-5176

Tests and other measurement devices; evaluation procedures and techniques; application of tests, measurement, or evaluation in educational projects of programs.

P. ERIC Clearinghouse on Urban Education
Teachers College, Columbia University
Institute for Urban and Minority Education
Box 40
525 West 120th Street
New York, New York 10027
Telephone: (212) 678-3433

The relationship between urban life and schooling; the effect of urban experiences and environments from birth onward; the academic, intellectual, and social performance of urban children and youth from grade three through college entrance (including the effect of self concept, motivation, and other affective influences), education of urban, Puerto Rican and Asian American populations, and rural and urban black populations; programs and practices which provide learning experiences designed to meet the special needs of diverse populations served by urban schools and which build upon their unique as well as their common characteristics, structural changes in the classroom, school, school system, and community and innovative instructional practices which directly affect urban children and youth; programs, practices, and materials related to economic and ethnic discrimination, segregation, desegregation, and integration in education; issues, programs, practices, and materials related to redressing the curriculum imbalance in the treatment of ethnic minority groups.

Q. Educational Resources Information Center
Central ERIC
National Institute of Education (NIE)
Information Resources Division
1200 - 19th Street, NW
Washington, DC 20208
Telephone: (202) 254-5500

There are other sources of educational information in many states. Included are information dissemination units in the state departments of education, intermediate education units, and local education units. In many cases, a local school administrator or school librarian can help you locate assistance.

VII. How to Order Materials

The AVAILABILITY field in the resume indicates where materials can be obtained. A few of the sources are explained.

A. A number of audiovisual materials can be obtained on a rental basis or purchased from the EQ Instructional Resources Center. Most items previously available from the NTOTC office are available from the EQ Instructional Resources Center at The Ohio State University. For further information write or call.

B. Some of the materials are available through the ERIC Document Reproduction Service. MF (microfiche) are 4" x 6" sheets of microfilm; up to 96 pages of text can be reproduced on one sheet. HC (paper copy) is a reproduction of the document in paper form at the original size.

Order forms for these materials can be obtained from:

ERIC Document Reproduction Service
3900 Wheeler Avenue
Alexandria, VA 22304
1-800-227-3742

C. The EQ Instructional resources Center will provide Xerox copies of materials that are not copyrighted for $1.00 per document plus $0.06 per page.

If you can not obtain materials that are listed or have difficulty obtaining materials, please contact the EQ Instructional Resources Center. We can provide assistance in obtaining materials from some sources. If materials become unavailable, we will remove them from the IRIS data base.

RESUME SECTION

IRIS ACCESSION NUMBER: EW011975

PUBLICATION DATE: 84

TITLE: STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER - 16TH EDITION.

DESCRIPTOR: ANALYTICAL TECHNIQUES; *CHEMICALS; *LABORATORY PROCEDURES; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *REGULATIONS; *SAMPLING; *STANDARDS; *TESTING; *WATER TREATMENT; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: PRICE: MEMBERS $72.00; NONMEMBERS $90.00

ABSTRACT: THIS IS THE 16TH EDITION OF THIS PUBLICATION. IT UPDATES EW 008 064. THE BOOK PROVIDES COMPREHENSIVE AND DETAILED GUIDELINES FOR THE ANALYSIS OF WATER AND WASTEWATER. THIS EDITION PRESENTS THE LATEST ADVANCES IN ANALYSIS TECHNOLOGY. THE METHODS PRESENTED ARE BELIEVED TO BE THE BEST AVAILABLE AND ACCEPTED PROCEDURES. MORE THAN 50 PERCENT OF THIS EDITION HAS BEEN REVISED, UPDATED, OR COMPLETELY REWRITTEN. MORE THAN 150 STANDARD ANALYTICAL PROCEDURES ARE INCLUDED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION, COMPUTER SERVICES DEPT., 6666 WEST QUINCY AVE., DENVER, CO 80235

IRIS ACCESSION NUMBER: EW012156

PUBLICATION DATE: 84

TITLE: IS YOUR PROPOSED WASTEWATER PROJECT TOO COSTLY? OPTIONS FOR SMALL COMMUNITIES.

DESCRIPTOR: *APPROPRIATE TECHNOLOGY; *COSTS; *FACILITIES; *PLANNING; *RURAL AREAS; *TECHNOLOGY; *WASTEWATER TREATMENT; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: PRICE: $1.42

ABSTRACT: THIS PUBLICATION CONSIDERS SOME OF THE WASTEWATER TREATMENT ALTERNATIVES FOR SMALL COMMUNITIES. THE EMPHASIS IS ON APPROPRIATE TECHNOLOGY AT A REASONABLE COST.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012157

PUBLICATION DATE: 85

TITLE: INNOVATIVE AND ALTERNATIVE TECHNOLOGY PROJECTS: 1985 PROGRESS REPORT.

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *EQUIPMENT; *FACILITIES; *INNOVATIONS; *OPERATIONS (WASTEWATER); *SLUDGE; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 41P. PRICE: $2.00

ABSTRACT: THIS IS THE 1985 SUMMARY OF PROGRESS IN THE IMPLEMENTATION OF INNOVATIVE AND ALTERNATIVE (I/A) TECHNOLOGIES UNDER PROVISIONS OF THE CLEAN WATER ACT. THE REPORT IS BASED ON GRANT AWARDS THROUGH MARCH FOR THE YEAR OF ISSUE. INFORMATION IS PROVIDED GIVING SITE OF THE INNOVATION, PROCESS OR INNOVATION BEING USED, DESIGN FLOW, BASIS OF APPROVAL, AND DESIGN CONSULTING FIRM.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012158

PUBLICATION DATE: 85

TITLE: REGULATION AND POLICY MATRICES. A GUIDE TO THE RULES GOVERNING GRANTS AWARDED UNDER THE CONSTRUCTION GRANTS PROGRAM. UPDATE-1985.

DESCRIPTOR: *CONSTRUCTION GRANTS PROGRAMS; *GRANT ADMINISTRATION; *GUIDELINES; *LEGISLATION; *MANAGEMENT; *POLICIES; *PROCEDURES; *REGULATIONS; *USEPA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 33P. PRICE: $2.98

ABSTRACT: THIS IS THE 1985 UPDATE MATERIAL FOR THE CONSTRUCTION GRANTS PROGRAM "REGULATION AND POLICY MATRICES".

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012159

PUBLICATION DATE: 85

TITLE: REGULATION AND POLICY MATRICES. A GUIDE TO THE RULES GOVERNING GRANTS AWARDED UNDER THE CONSTRUCTION GRANTS PROGRAM.

DESCRIPTOR: *CONSTRUCTION GRANTS PROGRAM; *FEDERAL REGULATIONS; *POLICIES; *PROCEDURES; *REGULATIONS; *USEPA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 162P. PRICE: $10.90

ABSTRACT: THIS IS A REVISED AND UPDATED VERSION OF THE "REGULATION AND POLICY MATRIX", PUBLISHED IN DECEMBER 1983. UPDATES TO THIS PUBLICATION (INSERTABLE SHEETS) WILL BE PRODUCED ANNUALLY. THIS MATRIX WAS DEVELOPED TO CLEARLY DELINEATE THE APPLICABLE REGULATIONS AND POLICIES IN EFFECT AT PARTICULAR INTERVALS OF TIME - THUS PROVIDING CONSTRUCTION GRANT STAFF AND AUDITORS WITH A COMPREHENSIVE BODY OF INFORMATION NEEDED TO EFFECTIVELY ASSESS ELIGIBLE AND ALLOWABLE COSTS DURING THE LIFE OF A GRANT PROJECT.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012160
PUBLICATION DATE: 85

TITLE: SMALL WASTEWATER SYSTEMS: ALTERNATIVE SYSTEMS FOR SMALL COMMUNITIES AND RURAL AREAS. UPDATE - 1985.

DESCRIPTOR: ALTERNATIVE WASTEWATER, SYSTEMS; CONSERVATION; *FACILITIES; FEDERAL PROGRAMS; *GUIDES; LAND APPLICATION; LAND USE; PLANNING; *RURAL AREAS; *SEPTIC SYSTEMS; SEWERS; *SMALL COMMUNITIES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 8P. PRICE: $1.48

ABSTRACT: THIS PUBLICATION ATTEMPTS TO ACQUAINT THE LAYPERSON WITH SOME ALTERTIVE WASTEWATER SYSTEMS FOR SMALL COMMUNITIES AND RURAL AREAS. TWENTY-ONE DIFFERENT SYSTEMS ARE DESCRIBED AND SKETCHED WITH POSSIBLE LOCATIONS INDICATED ON A HYPOTHETICAL COMMUNITY MAP. IN ADDITION, BRIEF INFORMATION IS PRESENTED ON THE EPA CONSTRUCTION GRANTS PROGRAM FOR ALTERNATIVE SYSTEMS. UPDATES SOME INFORMATION AND ADDRESSES TO THE EARLIER PUBLICATION.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012161

PUBLICATION DATE: 85

TITLE: TRANSMITTAL MEMORANDUM 85-1. HANDBOOK OF PROCEDURES. CONSTRUCTION GRANTS PROGRAM FOR MUNICIPAL WASTEWATER TREATMENT WORKS.

DESCRIPTOR: *CONSTRUCTION GRANTS PROGRAM; *DESIGN; *CONSTRUCTION; *FACILITIES; *FUNDING; *PLANNING; *REGULATIONS; *USEPA

DESCRIPTIVE NOTE: 91P. PRICE: $1.50

ABSTRACT: THIS PUBLICATION CONTAINS THE FIRST UPDATING TO THE HANDBOOK OF PROCEDURES. PAGES FOR THE UPDATES (REPLACEMENT PAGES) ARE INCLUDED. A SUMMARY CHART LISTING EACH REVISED PAGE AND THE REASON FOR THE CHANGES IS ALSO INCLUDED.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212.

IRIS ACCESSION NUMBER: EW012162

PUBLICATION DATE: 85

TITLE: HEAT TREATMENT/LOW PRESSURE OXIDATION SYSTEMS: DESIGN AND OPERATIONAL CONSIDERATIONS.

DESCRIPTOR: *DESIGN; *HEAT TREATMENT; *EQUIPMENT; *OXIDATION SYSTEMS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *THERMAL CONDITIONING; *WASTEWATER TREATMENT; *SLUDGE; *SLUDGE CONDITIONING

DESCRIPTIVE NOTE: 51P. PRICE: $2.00

ABSTRACT: THIS SUMMARY DOCUMENT IS BASED ON A STUDY BY EPA'S WATER ENGINEERING RESEARCH LABORATORY IN CINCINNATI, OHIO. THE STUDY WAS TO (1) IDENTIFY THE NATURE AND EXTENT OF PROBLEMS RELATED TO THERMAL CONDITIONING PROCESSES, (2) IDENTIFY POSSIBLE PROBLEM SOLUTIONS, AND (3) TO DETERMINE THE APPLICABILITY OF THE PROCESS FOR USE AS PART OF A SLUDGE TREATMENT SYSTEM IN A MUNICIPAL WASTEWATER TREATMENT FACILITY. THE DOCUMENT IS INTENDED TO PROVIDE A BASIC UNDERSTANDING OF THERMAL CONDITIONING CONSIDERATIONS, OPERATIONAL CHARACTERISTICS, PROCESS AND EQUIPMENT PROBLEMS, AND POSSIBLE SOLUTIONS.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012163

PUBLICATION DATE: 84

TITLE: OVERLAND FLOW: A DECADE OF PROGRESS.

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *DESIGN; *LAND APPLICATION; *MAINTENANCE; *OVERLAND FLOW; *OPERATIONS (WASTEWATER); *RESEARCH; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 16P. PRICE: $1.04

ABSTRACT: PRESENTS A SUMMARY OF RECENT RESEARCH, DESIGN, OPERATION, AND MAINTENANCE OF OVERLAND FLOW FOR WASTEWATER TREATMENT. SEVERAL SPECIFIC RESEARCH EFFORTS ARE SUMMARIZED.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012164

PUBLICATION DATE: 85

TITLE: CHEMICAL AND MICROBIAL ASPECTS OF SLUDGE COMPOSTING AND LAND APPLICATION.

PERSONAL AUTHOR: SIKORA, L. J.; AND OTHERS

DESCRIPTOR: BIOLOGY; CHEMISTRY; *COMPOSTING; *LAND APPLICATION; *PERFORMANCE EVALUATION; *RESEARCH; *SLUDGE; *SLUDGE COMPOSTING; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 103P. PRICE: $7.18

ABSTRACT: A SERIES OF SIX STUDIES WAS CONDUCTED TO EVALUATE SELECTED MICROBIAL AND CHEMICAL ASPECTS OF COMPOSTING AND SLUDGE SPREADING. AMMONIA (NH3 WAS SHOWN TO BE VIRICIDAL AT PH 7 TO 9). ENZYMATIC ACTIVITY WAS NOT INHIBITED WHEN WELL STABILIZED OR COMPOSTED SLUDGE CONTAINING HIGH CONCENTRATIONS OF METALS AND CHLORINATED HYDROCARBONS WAS ADDED TO SOILS. NITROGEN AND PHOSPHORUS MOVED DOWN THE SOIL PROFILE WHERE PLOTS WERE TREATED WITH 100 MG/HA ONCE OR 20 MG/HA FIVE TIMES. LABORATORY STUDIES OF COMPOSTING SHOWED

THAT CONTROLLED AERATION TO MAINTAIN TEMPERATURES BETWEEN 50 AND 55 DEGREES CELCIUS ALLOWED THERMOPHILIC DECOMPOSITION TO REMAIN CONSTANT, PRODUCED MORE DRYING AND CO2 THAN CONSTANT AERATION COMPOSTING. ASPERGILLUS FUMIGATUS AND THERMOPHILIC ACTINOMYCETES, LOW IN NON-AGRICULTURAL SITES, ARE COMMON AROUND COMPOSTING AND CROP RESIDUES.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012165

PUBLICATION DATE: 85

TITLE: WASTEWATER TREATMENT PLANT INSTRUMENTATION HANDBOOK.

PERSONAL AUTHOR: MANROSS, ROBERT C.

DESCRIPTOR: ANALYTICAL TECHNIQUES; *EQUIPMENT; *HANDBOOKS; *INSTRUMENTS; *INSTRUCTIONAL MATERIALS; *POSTSECONDARY EDUCATION; *OPERATIONS (WASTEWATER); *PROCESS CONTROLS; *PUMPS; *VALVES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 309P. PRICE: $16.45

ABSTRACT: INSTRUMENTS ARE REQUIRED FOR PROPER OPERATION OF WASTEWATER PLANTS. TO BE OF USE THE INSTRUMENTS MUST BE OPERABLE AND MAINTAINABLE. THIS REQUIRES CARE IN THE SELECTION, APPLICATION AND INSTALLATION OF INSTRUMENTS AND CONTROL EQUIPMENT. CONTENTS OF THE HANDBOOK ADDRESS THE "HOW-TO" OF DESIGNING AND APPLYING INSTRUMENTATION AND CONTROLS FOR WASTE TREATMENT OPERATIONS. SPECIAL FOCUS IS GIVEN TO PROBLEMS, CAUSES AND SOLUTIONS. THE HANDBOOK COVERS INSTRUMENTS, VALVES AND PUMPS COMMONLY USED IN WASTEWATER PLANTS. THE MATERIAL COVERS: (1) BASIC THEORY OF OPERATION; (2) APPLICATION; (3) INSTALLATION REQUIREMENTS; (4) MAINTENANCE AND CALIBRATION REQUIREMENTS; (5) SELECTION AND SIZING SPECIFICATIONS. THE MATERIAL IS INTENDED FOR USE BY INDIVIDUALS WITH NO PREVIOUS BACKGROUND OR SPECIALIZED KNOWLEDGE OF INSTRUMENTATION OR CONTROL EQUIPMENT. THOSE RESPONSIBLE FOR REVIEWING THE WORK DONE BY OTHERS, MAY FIND THE DESIGNERS CHECKLIST IN EACH SECTION A HELPFUL REFERENCE. IF MORE TECHNICAL INFORMATION IS REQUIRED, A REFERENCE IS INCLUDED AT THE END OF EACH SECTION.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012166

PUBLICATION DATE: 85

TITLE: SOIL PHYSICOCHEMICAL PARAMETERS AFFECTING METAL AVAILABILITY IN SLUDGE-AMENDED SOILS.

PERSONAL AUTHOR: GAMBRELL, ROBERT P.; AND OTHERS

DESCRIPTOR: *ENVIRONMENTAL IMPACT; *METALS; *RESEARCH REPORTS; *SLUDGE; *SEWAGE SLUDGE; *WASTE DISPOSAL; *SOILS

DESCRIPTIVE NOTE: 112P. PRICE: $7.72

ABSTRACT: A SERIES OF LABORATORY STUDIES WAS CONDUCTED TO DETERMINE THE EFFECTS OF SOIL PH AND REDOX POTENTIAL ON LEVELS OF TRACE METALS (CU, ZN, CD, PB, CR, NI, AND AS) IN SELECTED CHEMICAL FORMS AND THEIR AVAILABILITY TO PLANTS. THIS RESEARCH DEMONSTRATES THE IMPORTANT EFFECTS OF SOIL REDOX POTENTIAL CONDITIONS IN REGULATING THE CHEMICAL MOBILITY AND PLANT AVAILABILITY OF ZN AND CD, TWO KEY CONTAMINANTS IN SLUDGE MATERIALS THAT MAY BE APPLIED TO SOILS. WHERE ALTERNATIVES EXIST FOR DISPOSAL OF CONTAMINATED SLUDGE, WET OR POORLY OXIDIZED SOILS WOULD BE MORE EFFECTIVE IN IMMOBILIZING ZN AND CD, AND APPLICATION TO THESE SOILS WOULD RESULT IN LESS ACCUMULATION OF THESE METALS IN MOST CROPS OR PLANTS IN UNCULTIVATED HABITATS. UNLIKE RESULTS FOR CD AND ZN, OXIDATION STATUS HAD LITTLE, IF ANY, EFFECT ON PLANT LEVELS OF CR, NI, AND AS. PREDOMINANT CHEMICAL FORMS IN THE SLUDGE-AMENDED SOILS AND OXIDATION EFFECTS ON LEVELS IN THESE CHEMICAL FORMS ARE DISCUSSED IN THE REPORT. CHEMICAL AVAILABILITY AND PLANT UPTAKE STUDIES UNDER CONTROLLED PH AND REDOX POTENTIAL CONDITIONS INDICATED VARIOUS ORGANIC PHASES PREDOMINANT IN RETAINING CU UNDER REDUCING CONDITIONS. RESULTS WITH RICE WERE MIXED, BUT INCREASING OXIDATION CONDITIONS TENDED TO INCREASE CU IN CORN.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012205

PUBLICATION DATE: 84

TITLE: GUIDANCE FOR THE REREGISTRATION OF PESTICIDE PRODUCTS CONTAINING TRICHLORFON AS THE ACTIVE INGREDIENT.

DESCRIPTOR: *CHEMICALS; *PESTICIDES; *HAZARDOUS MATERIALS; *REGISTRATION; *REGULATIONS; *TOXIC SUBSTANCES; *TRICHLORFON

DESCRIPTIVE NOTE: 160P. ORDER NO.: PB85-149300/WEP; PRICE CODE: PC A08/MF A01

ABSTRACT: THIS DOCUMENT CONTAINS INFORMATION REGARDING REREGISTRATION OF PESTICIDE PRODUCTS CONTAINING THE SUBJECT ACTIVE INGREDIENT. THE DOCUMENT INCLUDES HOW TO REGISTER UNDER A REGISTRATION STANDARD, REGULATORY POSITION AND RATIONALE, AND SUMMARIES OF DATA REQUIREMENTS AND DATA GAPS. ALSO INCLUDED IS A BIBLIOGRAPHY CONTAINING CITATIONS OF ALL STUDIES REVIEWED BY EPA IN ARRIVING AT THE POSITIONS AND CONCLUSIONS CONTAINED IN THE STANDARD.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012272

PUBLICATION DATE: 85

TITLE: ARTIFICIAL RECHARGE OF GROUNDWATER.

PERSONAL AUTHOR: ASANO, TAKASHI
DESCRIPTOR: ARTIFICIAL RECHARGE; ECONOMICS; *GROUNDWATER; LEGAL ASPECTS; NATURAL RESOURCES; *PUBLIC HEALTH; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT; *WATER RESOURCES; *WATER QUALITY

DESCRIPTIVE NOTE: 800P. PRICE: $69.95

ABSTRACT: THIS BOOK FOCUSES ON ARTIFICIAL RECHARGE OF GROUNDWATER, WITH PARTICULAR EMPHASIS ON RECHARGE WITH RECLAIMED MUNICIPAL WASTEWATER. BEFORE RECHARGE CAN BE SERIOUSLY CONSIDERED AS A GROUNDWATER MANAGEMENT ALTERNATIVE, SIGNIFICANT PUBLIC HEALTH ISSUES MUST BE ADDRESSED AND CAREFULLY EVALUATED. IMPORTANT LEGAL, INSTITUTIONAL, AND ECONOMIC ASPECTS OF THE USE OF RECLAIMED WATER IN GROUNDWATER MANAGEMENT ARE DISCUSSED. CHAPTERS ALSO ADDRESS SUCH TOPICS AS AVAILABLE TREATMENT PROCESSES FOR MAKING WATER SUITABLE FOR RECHARGE, THE EFFECT OF INFILTRATION-PERCOLATION ON THE OVERALL TREATMENT SYSTEM'S PERFORMANCE AND RELIABILITY, AND THE FATE OF PATHOGENS, HEAVY METALS, AND INORGANIC AND STABLE ORGANIC SUBSTANCES IN THE RECLAIMED SYSTEMS.

AVAILABILITY: BUTTERWORTH PUBLISHERS, 80 MONTVALE AVENUE, STONEHAM, MA 02180

IRIS ACCESSION NUMBER: EW012292

PUBLICATION DATE: 85

TITLE: EMERGING TECHNOLOGY ASSESSMENT OF PHOSTRIP, A/O, AND BARDENPHO PROCESSES FOR BIOLOGICAL PHOSPHORUS REMOVAL.

DESCRIPTOR: *APPROPRIATE TECHNOLOGY; *A/O; *BARDENPHO; *COSTS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *PHOSPHORUS; *PHOSPHORUS REMOVAL; *PHOSTRIP; *TECHNOLOGY ASSESSMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 114P. PRICE: $7.84

ABSTRACT: THIS TECHNOLOGY ASSESSMENT ADDRESSES THREE PROPRIETARY PROCESSES (PHOSTRIP, A/O, AND BARDENPHO) FOR BIOLOGICAL PHOSPHORUS REMOVAL FROM MUNICIPAL WASTEWATERS. THE DEVELOPMENT STATUS OF THESE PROCESSES, PROCESS THEORY, CAPABILITIES, AND DESIGN CONSIDERATIONS ARE CONSIDERED. THE THREE PROPRIETARY PROCESSES WERE FOUND TO BE COST-EFFECTIVE AND PARTICULARY APPLICABLE UNDER STATED CONDITIONS.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012293

PUBLICATION DATE: 85

TITLE: INTEGRATION OF BUILDING AND ENERGY TECHNOLOGY WITH ON-SITE WASTE MANAGEMENT IN THE YEAR 2000.

PERSONAL AUTHOR: DEESE, PATRICIA L.; AND OTHERS
DESCRIPTOR: *ENERGY GENERATION; *ENERGY USE; *ENERGY RECOVERY; *RESIDENTIAL AREAS; *RESOURCE MANAGEMENT; *UTILITIES; *WASTE MANAGEMENT; *WATER SUPPLY

DESCRIPTIVE NOTE: 181P. PRICE: $11.86

ABSTRACT: DURING THIS STUDY THE POTENTIAL FEASIBILITY OF INTEGRATING WASTE MANAGEMENT, WATER SUPPLY AND ON-SITE ENERGY GENERATION WAS EXAMINED WITH THE OBJECTIVE OF IMPROVING THE OVERALL RESOURCE EFFICIENCY OF THE TYPICAL RESIDENTIAL UNIT. THE STUDY ATTEMPTED TO PROJECT VIABLE UTILITY SYSTEMS FOR HOMES IN RURAL AND SUBURBAN AREAS. AN ASSESSMENT OF THE 1980 STATE OF THE ART IS PROVIDED AND PROJECTIONS ARE MADE FOR THE YEAR 2000. THIS REPORT CAN BE USED BY MEMBERS OF THE VARIOUS RESEARCH AND DEVELOPMENT COMMUNITIES TO GAIN UNDERSTANDING OF OTHER FIELDS AND IS MEANT TO FOSTER THE APPRECIATION OF THE INTERRELATIONSHIPS BETWEEN RESIDENTIAL UTILITY SYSTEM.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012294

PUBLICATION DATE: 85

TITLE: COMBINED SEWER OVER FLOW SEDIMENT TRANSPORT MODEL: DOCUMENTATION AND EVALUATION.

PERSONAL AUTHOR: KEEFER, THOMAS; CLYDE, ERIC S.

DESCRIPTOR: *FLOW MODELS; *MODELS; *SEDIMENT; *SEDIMENT TRANSPORT SYSTEMS; *SEWERS; *SEWER OVERFLOW; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 241P. PRICE: $15.46

ABSTRACT: A MODELING PACKAGE FOR STUDYING THE MOVEMENT AND FATE OF COMBINED SEWER OVERFLOW (CSO) SEDIMENT IN RECEIVING WATERS IS DESCRIBED. THE PACKAGE CONTAINS A LINEAR, IMPLICIT, FINITE-DIFFERENCE FLOW MODEL AND AN EXPLICIT, FINITE-DIFFERENCE SEDIMENT TRANSPORT MODEL. THE SEDIMENT MODEL IS COUPLED TO THE FLOW MODEL BY MEANS OF A FILE CONTAINING VELOCITY, DEPTH, AND DISCHARGE AT EACH MODEL CROSS-SECTION AT EACH TIME STEP. THE OPERATION AND UTILITY OF THE MODEL PACKAGE WERE TESTED USING DATA FROM A 20-KM REACH OF THE SCIOTO RIVER BELOW THE WHITTIER STREET OUTFALL IN COLUMBUS, OHIO. A PRELIMINARY FIELD INVESTIGATION OF THE STUDY REACH IN JULY 1980 COLLECTED SUFFICIENT DATA TO PARTIALLY CALIBRATE THE FLOW MODEL. DATA FROM A CSO EVENT IN SEPTEMBER 1981 WERE USED TO FURTHER CALIBRATE THE FLOW MODEL AND EVALUATE THE SEDIMENT TRANSPORT MODEL OPERATION. THE FLOW MODEL REPRODUCED STAGES AND DISCHARGES WITH SUFFICIENT ACCURACY FOR LINKAGE WITH THE SEDIMENT MODEL. THE SEDIMENT MODEL PRODUCED SMOOTHED ESTIMATES OF SEDIMENT CONCENTRATIONS THAT FELL WITHIN THE SCATTER OF OBSERVED DATA IN MOST INSTANCES. CSO SEDIMENT SIZES AND THE ARMORED NATURE OF THE SCIOTO RIVER CHANNEL WERE SUCH THAT ALL SOLIDS DISCHARGED FROM THE CSO WERE CONVECTED THROUGH THE REACH WITH NO

DEPOSITION EVEN AT LOW FLOW. EXPERIMENTS WITH THE SEDIMENT MODEL INDICATE THAT IT CAN BE USED FOR QUALITATIVE ASSESSMENTS OF THE FATE OF VARIOUS SIZE SEDIMENT SIZE FRACTIONS IF PROPERLY CALIBRATED.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012295

PUBLICATION DATE: 85

TITLE: CHARACTERIZING AND CONTROLLING URBAN RUNOFF THROUGH STREET AND SEWERAGE CLEANING.

PERSONAL AUTHOR: PITT, ROBERT

DESCRIPTOR: *MAINTENANCE; *MONITORING; *RESEARCH REPORTS; *SEWERS; *SURFACE RUNOFF; *STREET CLEANING; *URBAN AREAS; *WASHINGTON

DESCRIPTIVE NOTE: 474P. PRICE: $29.44

ABSTRACT: A SERIES OF PROJECTS WERE CONDUCTED FROM 1978 THROUGH 1983 IN BELLEVUE, WASHINGTON, TO INVESTIGATE BELLEVUE'S URBAN RUNOFF SOURCES, EFFECTS, AND POTENTIAL CONTROLS. THIS REPORT PRESENTS RESULTS OF THE PROJECT CONDUCTED BY THE CITY OF BELLEVUE THAT WAS SPONSORED BY THE STORM AND COMBINED SEWER SECTION OF THE U.S. EPA. THE PROJECT LASTED FROM 1980 TO 1983 AND WAS MOSTLY CONCERNED WITH URBAN RUNOFF CHARACTERIZATION AND CONTROL BY STREET AND SEWERAGE CLEANING. THIS PROJECT COMPLETELY MONITORED MORE THAN 300 URBAN RUNOFF EVENTS IN TWO RESIDENTIAL AREAS DURING THE PROJECT PERIOD. FLOW-WEIGHTED COMPOSITE SAMPLES WERE ANALYZED FOR A CORE LIST OF IMPORTANT CONSTITUENTS. COMPLETE FLOW MONITORING RESULTS ALLOWED DETAILED DESCRIPTIONS OF URBAN RUNOFF QUALITY AND QUANTITY, AND ALLOWED ESTIMATES TO BE MADE CONCERNING THE CONTRIBUTIONS OF FLOWS AND POLLUTANTS FROM DIFFERENT SOURCE AREAS. STREET SURFACE AND SEWERAGE PARTICULATES WERE ALSO COLLECTED AND ANALYZED TO DETERMINE THE EFFECTIVENESS OF STREET AND SEWERAGE CLEANING. MOST OF THE HEAVY METALS WERE DETERMINED TO ORIGINATE FROM STREET DIRT, BUT STREET CLEANING WAS FOUND TO ONLY CONTROL URBAN RUNOFF BY A MAXIMUM OF ABOUT TEN PERCENT. A SPECIAL MODIFIED STREET CLEANER WAS TESTED AND FOUND TO BE MUCH MORE EFFECTIVE IN REMOVING THE SMALLER SIZED STREET DIRT THAT IS WASHED OFF THESE STREETS BY RAINS. CATCHBASIN CLEANING TWICE A YEAR WAS ESTIMATED TO BE ABOUT 25 PERCENT EFFECTIVE, AT THE MOST.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012296

PUBLICATION DATE: 85

TITLE: RECOMMENDED PRACTICES FOR ON-LINE MEASUREMENT OF RESIDUAL CHLORINE IN WASTEWATERS.

PERSONAL AUTHOR: KULIN, GERSHON

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHLORINE ANALYZERS; *DISINFECTION; *MAINTENANCE; *MEASUREMENT; *OPERATIONS (WASTEWATER); *RESIDUAL CHLORINE; *SAMPLING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 29P. PRICE: $2.74

ABSTRACT: THIS DOCUMENT PROVIDES USERS WITH INFORMATION THAT ASSISTS THEM IN SPECIFYING, INSTALLING, CALIBRATING, MAINTAINING AND MONITORING THE SUBSEQUENT PERFORMANCE OF ON-LINE RESIDUAL CHLORINE ANALYZERS IN WASTEWATER TREATMENT PLANTS. AN ON-LINE RESIDUAL CHLORINE ANALYZER MUST HAVE, AMONG OTHER CHARACTERISTICS: CAPABILITY FOR CONTINUOUS OPERATION; A SAMPLING SYSTEM THAT ASSURES A REPRESENTATIVE SAMPLE WITH THE PROPER CONTACT TIME; RANGE OF FROM 0-1 TO 0-10 MG/L OF CHLORINE RESIDUAL DEPENDING UPON THE APPLICATION; ACCURACY AND PRECISION WITHIN 3 PERCENT AND 1 PERCENT OF RANGE, RESPECTIVELY; RESPONSE TIME LESS THAN THREE MINUTES; AND ON-SITE READOUT AND OUTPUT CAPABILITY FOR TRANSMISSION TO A CONTROLLER AND/OR RECORDER. CALIBRATIONS SHOULD BE BASED ON AMPEROMETRIC BACK TITRATION AND SHOULD BE PERFORMED AT FREQUENCIES THAT ARE BASED ON DOCUMENTATION OBTAINED DURING STARTUP. METHODS FOR DEVELOPING THIS INFORMATION AND OTHER PROCEDURES FOR MEASUREMENT ASSURANCE ARE DISCUSSED. RECOMMENDED MAINTENANCE GUIDELINES ARE GIVEN.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012297

PUBLICATION DATE: 85

TITLE: REMOVAL OF HEAVY METALS USING ALUMINUM SALTS FOR PHOSPHORUS REMOVAL.

PERSONAL AUTHOR: AULENBACH, DONALD B.; AND OTHERS

DESCRIPTOR: ALUMINUM; *ALUMINUM SALTS; *HEAVY METALS: METALS; *METAL REMOVAL; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; PHOSPHORUS; *PHOSPHORUS REMOVAL; *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 288P. PRICE: $18.28

ABSTRACT: THE USE OF ALUMINUM SALTS TO REMOVE PHOSPHORUS IS COMMON PRACTICE. IT HAS BEEN SHOWN THAT ALUMINUM SALTS ARE ALSO CAPABLE OF REMOVING HEAVY METALS, BUT THE DOSAGES WERE MUCH GREATER THAN NORMALLY APPLIED FOR PHOSPHORUS REMOVAL. THIS STUDY INVESTIGATED THE REMOVAL OF HEAVY METALS IN TREATMENT PLANTS WHICH UTILIZE ALUMINUM SALTS FOR PHOSPHORUS REMOVAL. BY CHOOSING POTW'S WHICH PRACTICED PHOSPHORUS REMOVAL DURING THE SUMMER ONLY AND SAMPLING BEFORE AND AFTER THE DISCONTINUATION OF ALUMINUM SALT ADDITION, THE EFFECT OF ALUMINUM SALT PRECIPITATION ON HEAVY METAL REMOVAL WAS DETERMINED. THE RESULTS SHOW THAT COPPER, CHROMIUM, AND TO SOME EXTENT, LEAD REMOVAL WAS ENHANCED BY ALUMINUM SALT

ADDITION. FOR CHROMIUM, IT APPEARS THAT SODIUM ALUMINATE ADDITION IMPROVED REMOVAL BUT ALUM ADDITION HAS NO EFFECT. THE RESULTS CONFIRM THAT PHOSPHORUS REMOVAL IS ENHANCED BY THE PRECIPITANT ADDITION. OF THE OTHER METALS EVALUATED, ALUMINUM SALT ADDITION APPEARED TO HAVE NO SIGNIFICANT EFFECT ON CADIUM AND ANTIMONY REMOVAL, NOR DID IT AFFECT TOC REMOVAL.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012298

PUBLICATION DATE: 85

TITLE: DEMONSTRATION OF ACCEPTABLE SYSTEMS FOR LAND DISPOSAL OF SEWAGE SLUDGE.

DESCRIPTOR: *DEMONSTRATIONS; FERTILIZERS; *LAND APPLICATION; *LAND DISPOSAL; PUBLIC HEALTH; *RESEARCH REPORTS; SLUDGE; *SEWAGE SLUDGE; *WASTE DISPOSAL; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 544P. PRICE: $33.64

ABSTRACT: THE OBJECTIVE WAS TO DEMONSTRATE SLUDGE APPLICATION SYSTEMS FOR FARMLAND THAT WOULD MINIMIZE ANY ADVERSE EFFECTS ON THE ENVIRONMENT AND PUBLIC HEALTH, ACHIEVE BOTH URBAN AND RURAL ACCEPTANCE, AND BE GENERALLY BENEFICIAL FOR PRODUCER AND RECEPTOR OF THE SLUDGE. A COMPREHENSIVE HEALTH EFFECTS STUDY OF THE FAMILIES LIVING ON SLUDGE-RECEIVING FARMS WAS CONDUCTED. HEALTH STATUS OF RESIDENTS OF 47 SLUDGE-USING FARMS WERE COMPARED WITH 46 CONTROL FARMS. NEITHER INCIDENCE OF DISEASE, NOR EVIDENCE OF VIRAL INFECTIONS DIFFERED SIGNIFICANTLY BETWEEN SLUDGE-USING AND CONTROL FARMS. NEITHER WAS THE HEALTH OF LIVESTOCK FOUND TO BE DIFFERENT BETWEEN THE TWO GROUPS OF FARMS. THE SLUDGE WAS EFFECTIVE IN INCREASING CROP YIELDS OVER YIELDS WITHOUT SLUDGE OR FERTILIZER.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012299

PUBLICATION DATE: 85

TITLE: EVALUATION OF COLOR INFRARED AERIAL SURVEYS OF WASTEWATER SOIL ABSORPTION SYSTEMS.

PERSONAL AUTHOR: FARRELL, SUSAN O.

DESCRIPTOR: *AERIAL SURVEYS; *COLOR INFRARED; *EFFLUENTS; LAND APPLICATION; *MONITORING; *LITERATURE REVIEWS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; SOIL; *SOIL ABSORPTION SYSTEMS; *SURVEYS; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 81P. PRICE: $5.86

ABSTRACT: COLOR INFRARED (CIR) AERIAL SURVEYS CAN IDENTIFY SOIL ABSORPTION SYSTEMS IN WHICH THE EFFLUENT RISES RATHER THAN PERCOLATES INTO THE GROUND WATER. THIS REPORT REVIEWS THE TECHNIQUE'S SCIENTIFIC BASIS AND EFFECTIVENESS, AND DISCUSSES THE PROCEDURES AND EQUIPMENT REQUIRED FOR SUCH SURVEYS, AND SURVEY COSTS.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012300

PUBLICATION DATE: 85

TITLE: DETERMINING THE STABILITY OF TREATED MUNICIPAL SLUDGES.

PERSONAL AUTHOR: JERIS, JOHN S.; AND OTHERS

DESCRIPTOR: *LABORATORY STUDIES; *LITERATURE REVIEWS; *OPERATIONS (WASTEWATER); *SLUDGE DIGESTION; *SLUDGE STABILITY; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 203P. PRICE: $13.18

ABSTRACT: THE OBJECTIVE OF THIS PROJECT WAS TO DETERMINE THE POTENTIAL FOR FURTHER BIOLOGICAL DEGRADATION BIOLOGICALLY OF MUNICIPAL SLUDGES WHICH HAVE UNDERGONE EITHER LITTLE OR MAJOR TREATMENT. A LITERATURE SURVEY WAS CONDUCTED TO DETERMINE THE MOST FRUITFUL APPROACHES, FOLLOWED BY LABORATORY SCALE STUDIES. THE LITERATURE SURVEY SUMMARIZES AVAILABLE INFORMATION RELATED TO THE CHARACTERISTICS AND VARIOUS STABILITY PARAMETERS OF MUNICIPAL SLUDGES THAT HAVE UNDERGONE TREATMENT BY ANAEROBIC, AEROBIC OR THERMAL CONDITIONING PROCESSES. THE LABORATORY STUDY BUILT UPON METHODS DESCRIBED IN THE LITERATURE FOR EVALUATING STABILITY OF SLUDGES. STABILITY OF A VARIETY OF RECEIVED SLUDGES WAS EVALUATED BY MEASURING RESPONSE TO ADDITIONAL AEROBIC OR ANAEROBIC DIGESTION OF LONG DURATION, AND BY CUMULATIVE GENERATION OF HYDROGEN SULFIDE. RESPONSES TO AEROBIC DIGESTION OF THE AS-RECEIVED SLUDGES WERE GENERALLY SIMILIAR AND SHOWED SUBSTANTIAL REDUCTIONS IN PARAMETERS SUCH AS BOD AND COD. OXYGEN UPTAKE EVENTUALLY REACHED A LOW STABLE VALUE. THE SAME KIND OF REDUCTION IN PARAMETERS OCCURRED WITH ANAEROBIC DIGESTION. THE HYDROGEN SULFIDE GENERATION TEST GENERALLY SHOWED WELL DEFINED POINTS AT WHICH H2S GENERATION VIRTUALLY CEASED AS SLUDGE STORAGE INCREASED. THIS TEST SHOWS PROMISE AS A METHOD FOR COMPARING SLUDGES FOR POTENTIAL FOR FURTHER BIOLOGICAL DECOMPOSITION. ALTHOUGH MUCH HAS BEEN LEARNED ABOUT THE RESPONSE OF VARIOUS PARAMETERS INDICATIVE OF SLUDGE STABILITY TO FURTHER DIGESTION, A SIMPLE MEASUREMENT INDICATING SLUDGE STABILITY WAS NOT DEVELOPED.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012327

PUBLICATION DATE: 80

TITLE: A STRATEGY FOR SMALL ALTERNATIVE WASTEWATER SYSTEMS.

DESCRIPTOR: *MANAGEMENT; *OPERATIONS (WASTEWATER); *PROGRAM DESCRIPTIONS; *RURAL AREAS; *ONSITE WASTEWATER TREATMENT; *PLANNING; *PERFORMANCE; *SAWS; *WASTEWATER TREATMENT; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 44P. PRICE: $2.64

ABSTRACT: THIS PAPER DESCRIBES RECENT FEDERAL, STATE, AND LOCAL SMALL ALTERNATIVE WASTEWATER SYSTEM (SAWS) PROGRAMS AND IDENTIFIES A NUMBER OF PROBLEMS AND ISSUES INHIBITING IMPLEMENTATION OF ADEQUATE SAWS MANAGEMENT PROGRAMS. SECTIONS ARE INCLUDED FOR (1) INTRODUCTION AND BACKGROUND, (2) STRATEGY FOR IMPROVING SAWS MANAGEMENT, (3) ISSUES AND OPPORTUNITIES, AND (4) EXISTING SAWS PROGRAMS.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012332

PUBLICATION DATE: 83

TITLE: OPERATING PROCEDURES FOR "MONITORING CONSTRUCTION ACTIVITIES"--AT PROJECTS FUNDED UNDER THE EPA

DESCRIPTOR: *COMPLIANCE; *CONSTRUCTION; *CONSTRUCTION GRANTS PROGRAM; *FACILITIES; *GUIDELINES; *INSPECTION; *MONITORING; *OPERATING PROCEDURES; *REPORTING; *USEPA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 29P. PRICE: $2.74

ABSTRACT: THE PURPOSE OF THIS DOCUMENT IS TO PROVIDE GENERAL OPERATING GUIDANCE TO "AGENCIES" (CORPS, STATES, EPA) PERFORMING CONSTRUCTION INSPECTIONS AND RELATED ACTIVITIES ON PROJECTS FUNDED UNDER THE ENVIRONMENTAL PROTECTION AGENCY'S CONSTRUCTION GRANTS PROGRAM. SECTIONS ARE INCLUDED ON INTERIM INSPECTION, FREQUENCY OF INSPECTIONS, PRECONSTRUCTION CONFERENCE, DOCUMENTATION AND PREPARATION, CONSTRUCTION MANAGEMENT, CONSTRUCTION, FINAL CONSTRUCTION INSPECTION, REPORTING, AND FOLLOW-UP.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012335

PUBLICATION DATE: 82

TITLE: MANAGEMENT OF ON-SITE AND SMALL COMMUNITY WASTEWATER SYSTEMS.

DESCRIPTOR: DESIGN; FACILITIES; FINANCES; *MANAGEMENT; MAINTENANCE; *ONSITE WASTEWATER TREATMENT; *OPERATIONS (WASTEWATER); *PLANNING; *RURAL AREAS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 239P. PRICE: $7.00

ABSTRACT: THE DOCUMENT REPRESENTS A RELATIVELY SIMPLE, YET COMPREHENSIVE GUIDE TO SMALL COMMUNITIES AND THEIR ENGINEERS TO DEVELOP AN EFFECTIVE AND, HOPEFULLY, OPTIMAL MANAGEMENT PROGRAM FOR ALTERNATIVE TECHNOLOGIES WHICH ARE APPROPRIATE TO SOLVING THEIR WASTEWATER POLLUTION PROBLEMS. ALTHOUGH IT IS PREPARED TO RESPOND TO THE REQUIREMENTS OF THE U.S. EPA CONSTRUCTION GRANTS PROGRAM, THE TEXT IS APPLICABLE TO ALL EXISTING SMALL COMMUNITIES WISHING TO OPTIMIZE THE PERFORMANCE OF EXISTING OR PLANNED ON-SITE OR SMALL COMMUNITY WASTEWATER TREATMENT AND DISPOSAL SYSTEMS. BY PRESENTING OPTIMUM MANAGEMENT PROGRAM SELECTION IN A SIMPLE STEP-BY-STEP FASHION, THIS GUIDE PERMITS THE USER TO DESIGN THE APPROPRIATE PROGRAM BASED ON TECHNICAL PROCESSES AND PHYSICAL, ECONOMIC AND ADMINISTRATIVE CONSTRAINTS EXTANT IN THE SERVICE AREA.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012336

PUBLICATION DATE: 84

TITLE: CONSTRUCTION GRANTS PROGRAM FOR MUNICIPAL WASTEWATER TREATMENT WORKS HANDBOOK OF PROCEDURES.

DESCRIPTOR: *CONSTRUCTION GRANTS; *FEDERAL ROLE; *HANDBOOKS; *LEGISLATION; *POLICIES; *PROCEDURES; *REGULATIONS; *STATE ROLE; *USEPA

DESCRIPTIVE NOTE: 516P. PRICE: $13.00. ALSO AVAILABLE FROM EQ/IRC AT $13.00 EACH WHILE SUPPLY LASTS.

ABSTRACT: THIS HANDBOOK OF PROCEDURES IDENTIFIES AND EXPLAINS THE MANY PROCEDURES TO BE FOLLOWED BY PROJECT REVIEWERS AND OTHER PERSONNEL IN STATE AGENCIES AND EPA REGIONAL OFFICES WHO ARE RESPONSIBLE FOR THE CONDUCT OF THE CONSTRUCTION GRANTS PROGRAM. IT IS INTENDED TO SERVE AS A GUIDE IN PROCESSING GRANT APPLICATIONS FOR STEP 2 AND 3 AND STEP 3 PROJECTS AS OF OCTOBER 1, 1984. A COMPANION DOCUMENT, "CONSTRUCTION GRANTS 1985" (CG-85), HAS BEEN WRITTEN FOR POTENTIAL GRANT APPLICANTS AND GRANTEES. THIS THIRD EDITION OF THE HANDBOOK OF PROCEDURES REPLACES EARLIER EDITIONS AND REFLECTS LAWS, REGULATIONS, AND US EPA POLICIES IN EFFECT AS OF OCTOBER 1, 1984.

AVAILABILITY: GOVERNMENT PRINTING OFFICE, SUPERINTENDENT OF DOCUMENTS, WASHINGTON, DC

IRIS ACCESSION NUMBER: EW012337

PUBLICATION DATE: 85

TITLE: NPDES SELF-MONITORING SYSTEM-USER GUIDE.

DESCRIPTOR: *COMPLIANCE; *FACILITIES; *MONITORING; *OPERATIONS (WASTEWATER); *NPDES; *PERMIT REQUIREMENTS; *REPORTING; *USER GUIDES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 28P. PRICE: $1.50

ABSTRACT: THIS BOOKLET IS DESIGNED TO ASSIST THE NPDES PERMITTEE IN DEVELOPING, OPERATING, AND MAINTAINING A SELF-MONITORING SYSTEM THAT WILL ENABLE THE PERMITTEE TO COMPLY WITH PERMIT REQUIREMENTS. THE AMOUNTS OF TIME SPENT EACH DAY ON MONITORING, RECORDING, AND REPORTING WILL PAY OFF IN MORE EFFICIENT PLANT OPERATION, AND WILL ULTIMATELY RESULT IN ACHIEVING THE GOAL OF IMPROVED WATER QUALITY.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012377

PUBLICATION DATE: 84

TITLE: CHLORINATED ORGANIC COMPOUNDS IN DIGESTED, HEAT-CONDITIONED, AND PURIFAX-TREATED SLUDGES.

PERSONAL AUTHOR: PINCINCE, ALBERT B.; FOURNIER, CHRISTOPHER J.

DESCRIPTOR: *CHLORINATED COMPOUNDS; *OPERATIONS (WASTEWATER); *ORGANIC CHEMICALS; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *SLUDGE STABILIZATION; *WASTE DISPOSAL

DESCRIPTIVE NOTE: PRICE CODE: PB84-212695. COST: $13.00

ABSTRACT: A STUDY WAS CONDUCTED TO INVESTIGATE THE EFFECTS OF SLUDGE STABILIZATION METHODS ON THE PRODUCTION OF PRIORITY POLLUTANTS AND CHLORINATED ORGANICS. THREE STABILIZATION METHODS WERE EXAMINED IN PILOT STUDIES - THE PURIFAX PROCESS, ANAEROBIC DIGESTION, AND HEAT CONDITIONING. RESULTS ARE REPORTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012380

PUBLICATION DATE: 84

TITLE: CHEMICAL ENGINEERING SOFTWARE GUIDE.

DESCRIPTOR: *CHEMICAL ENGINEERING; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *COMPUTER PROGRAMS; *DIRECTORIES; *GUIDES; *MICROCOMPUTERS

ABSTRACT: THIS REPORT SURVEYS OVER 300 SPECIALIZED COMPUTER SOFTWARE PACKAGES RELATED TO CHEMICAL ENGINEERING. THE PACKAGES ARE FOR A VARIETY OF MICROCOMPUTERS.

AVAILABILITY: CAE CONSULTANTS, INC., 41 TRAVERS AVE., YONKERS, NY 10705

IRIS ACCESSION NUMBER: EW012381

PUBLICATION DATE: 85

TITLE: UNDERGROUND PIPING HANDBOOK.

PERSONAL AUTHOR: PEGGS, LAWRENCE A.

DESCRIPTOR: *DESIGN; *CONSTRUCTION; *INSPECTION; *PIPES; *SEWERS; *WASTEWATER COLLECTION; *WATER DISTRIBUTION

DESCRIPTIVE NOTE: 283P. PRICE: $23.50

ABSTRACT: THIS BOOK PROVIDES THE INFORMATION REQUIRED TO DESIGN, PREPARE CONSTRUCTION DRAWINGS, INSTALL, INSPECT, TEST, AND COMMISSION BURIED PIPING. BOTH PRESSURE AND GRAVITY PIPING ARE COVERED INCLUDING WATER, STEAM, GASES, AND SEWERS.

AVAILABILITY: KRIEGER PUBLISHING CO., INC., P.O. BOX 9542, MELBOURNE, FL 32902-9542

IRIS ACCESSION NUMBER: EW012385

PUBLICATION DATE: 85

TITLE: WHEN IN ROME.

PERSONAL AUTHOR: CATHCART, JIM; ALESSANDRA, TONY

DESCRIPTOR: *BEHAVIOR; *COMMUNICATION; *SPEAKING

DESCRIPTIVE NOTE: 22-24P.

ABSTRACT: THIS ARTICLE EXPLAINS HOW TO GEAR A PRESENTATION TO AN AUDIENCE TYPE.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N6

IRIS ACCESSION NUMBER: EW012386

PUBLICATION DATE: 85

TITLE: BREAKING THE ICE.

PERSONAL AUTHOR: BRUE, CORRINE

DESCRIPTOR: *CLASSROOM CLIMATE; *INSTRUCTION; *LEARNING; *MOTIVATION; *TEACHER BEHAVIOR; *TRAINING; *WORKSHOPS

DESCRIPTIVE NOTE: 26-28P.

ABSTRACT: DESCRIBED ARE WAYS TO MAKE THE CLIMATE OF A CLASS MORE COMFORTABLE AND MORE CONDUCIVE TO EFFECTIVE AND ENJOYABLE LEARNING.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N6

IRIS ACCESSION NUMBER: EW012387

PUBLICATION DATE: 85

TITLE: PLEASANT WEATHER FOR LEARNING.

PERSONAL AUTHOR: BELL, CHIP R.; MARGOLIS, FREDRIC H.

DESCRIPTOR: *CLASSROOM CLIMATE; *INSTRUCTION; *LEARNING; *MOTIVATION; *TEACHER BEHAVIOR; *TRAINING; *WORKSHOPS

DESCRIPTIVE NOTE: 30-31P.

ABSTRACT: THIS ARTICLE DESCRIBES WAYS TO IMPROVE CLASSROOM CLIMATE.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N6

IRIS ACCESSION NUMBER: EW012388

PUBLICATION DATE: 85

TITLE: SURVIVING THE Q & A PERIOD.
PERSONAL AUTHOR: LYNCH, PATRICIA L.

DESCRIPTOR: *COMMUNICATION; *INSTRUCTION; *SPEECHES; *TRAINING; *WORKSHOPS

DESCRIPTIVE NOTE: 32-33P.

ABSTRACT: SUGGESTIONS AND GUIDELINES ARE PROVIDED FOR HANDLING QUESTION AND ANSWER PERIODS AFTER A SPEECH OR PRESENTATION.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N6

IRIS ACCESSION NUMBER: EW012389

PUBLICATION DATE: 85

TITLE: STIMULATION.

PERSONAL AUTHOR: WLODKOWSKI, RAYMOND J.

DESCRIPTOR: *INSTRUCTION; *LEARNING; *MOTIVATION; *TEACHER BEHAVIOR; *TRAINING; *WORKSHOPS

DESCRIPTIVE NOTE: 38-43P.

ABSTRACT: THIS ARTICLE PRESENTS SEVERAL SUGGESTIONS FOR MOTIVATING AND STIMULATING STUDENTS TO IMPROVE LEARNING.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N6

IRIS ACCESSION NUMBER: EW012390

PUBLICATION DATE: 85

TITLE: 16 TIPS TO INCREASE YOUR EFFECTIVENESS.

PERSONAL AUTHOR: FETTEROLL, EUGENE C.

DESCRIPTOR: *INSTRUCTION; *LEARNING; *TEACHER BEHAVIOR; *TRAINING; *WORKSHOPS

DESCRIPTIVE NOTE: 68-70P.

ABSTRACT: PROVIDED ARE 16 PRACTICAL TIPS TO INCREASE INSTRUCTOR EFFECTIVENESS.

AVAILABILITY: TRAINING AND DEVELOPMENT JOURNAL; V39 N6

IRIS ACCESSION NUMBER: EW012466

PUBLICATION DATE: 85

TITLE: WATER MAIN CLEANOUT RESTORES EFFICIENT SERVICE.

DESCRIPTOR: *CLEANING; *CONTRACT SERVICES; *DRINKING WATER; *MAINTENANCE; *OPERATIONS (WATER); *WATER PIPES; *WATER DISTRIBUTION; *WATER SUPPLY
DESCRIPTIVE NOTE: 76-77P.

ABSTRACT: DESCRIBED IS HOW A CONTRACT CLEANING SERVICE RESTORED CAPACITY OF A MAJOR WATER TRANSMISSION MAIN WITH MINIMUM INCONVENIENCE TO CUSTOMERS.

AVAILABILITY: PUBLIC WORKS; V116 N8

IRIS ACCESSION NUMBER: EW012467

PUBLICATION DATE: 85

TITLE: DRILLING A WELL? CONSULT A HYDROGEOLOGIST.

PERSONAL AUTHOR: POPKO, KATHERINE A.; FORD, M. E., JR.

DESCRIPTOR: *CONSTRUCTION; *DRILLING; *DRINKING WATER; *HYDROGEOLOGISTS; *PLANNING; *WATER WELLS; *WELLS; *WATER SUPPLY

DESCRIPTIVE NOTE: 80-81P.

ABSTRACT: DESCRIBED IS A STEP-BY-STEP REVIEW OF WELL CONSTRUCTION DETAILS USING A HYDROGEOLOGIST'S EXPERTISE.

AVAILABILITY: PUBLIC WORKS; V116 N8

IRIS ACCESSION NUMBER: EW012468
PUBLICATION DATE: 85

TITLE: WHEN ONE WATER TANK IS BETTER THAN THREE.

PERSONAL AUTHOR: BIGGS, JEFFREY A., P.E., P.P.

DESCRIPTOR: *COSTS; *DESIGN; *DRINKING WATER; *NEW JERSEY; *OPERATIONS (WATER); *PLANNING; *PUMPING STATIONS; *WATER DISTRIBUTION; *WATER STORAGE; *WATER SUPPLY; *WATER TANKS

DESCRIPTIVE NOTE: 84-85P.

ABSTRACT: DEVELOPERS IN A NEW JERSEY TOWNSHIP BUILD ONE CENTRAL FACILITY INSTEAD OF BUILDING A SERIES OF SMALL WATER STORAGE TANKS AND PUMPING STATIONS.

AVAILABILITY: PUBLIC WORKS; V116 N8

IRIS ACCESSION NUMBER: EW012469

PUBLICATION DATE: 85

TITLE: ENFORCING INDUSTRIAL WASTE PRETREATMENT REGULATIONS: A CASE HISTORY.

PERSONAL AUTHOR: GRANDIN, WAYNE T.; MANNIX, DAVID E.

DESCRIPTOR: *CASE STUDIES; *COMPLIANCE; *ENFORCEMENT; *ENFORCEMENT PROCEDURES; *INDUSTRIAL WASTES; *MASSACHUSETTS; *OPERATIONS (WASTEWATER); *PLANNING; *PRETREATMENT; *PROGRAM DESCRIPTIONS; *REGULATIONS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 86-88P.

ABSTRACT: EFFECTIVE ENFORCEMENT PROCEDURES ARE CRUCIAL TO THE SUCCESS OF AN INDUSTRIAL WASTE PRETREATMENT PROGRAM. DESCRIBED IS A CASE HISTORY OF A METROPOLITAN DISTRICT IN MASSACHUSETTS.

AVAILABILITY: PUBLIC WORKS; V116 N8

IRIS ACCESSION NUMBER: EW012470

PUBLICATION DATE: 85

TITLE: WASTEWATER TREATMENT PLANT TO GENERATE POWER.

DESCRIPTOR: *COLORADO; *COSTS; *ENERGY; *ELECTRICITY; *HEATING; *INCOME GENERATION; *METHANE; *OPERATIONS (WASTEWATER); *RECYCLING; *RESOURCE RECOVERY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 124P.

ABSTRACT: METHANE FUELED ENGINE GENERATORS WERE INSTALLED IN A DENVER WASTEWATER TREATMENT PLANT. THE WASTE GAS WILL PRODUCE ELECTRICITY FOR SALE AND HEAT FOR OPERATIONS.

AVAILABILITY: PUBLIC WORKS; V116 N8

IRIS ACCESSION NUMBER: EW012471

PUBLICATION DATE: 85

TITLE: NOTES ARE NOT ENOUGH.

PERSONAL AUTHOR: GLADIS, STEPHEN D.

DESCRIPTOR: *COMMUNICATION; *INSTRUCTION; *NONVERBAL COMMUNICATION; *TEACHER BEHAVIOR; *TRAINING

DESCRIPTIVE NOTE: 35-38P.

ABSTRACT: DESCRIBED ARE NONVERBAL ACTIONS THAT COMMUNICATE VARIOUS FEELINGS. SUGGESTIONS FOR DEVELOPING POSITIVE NONVERBAL COMMUNICATION ARE GIVEN.

AVAILABILITY: TRAINING AND DEVELOPMENT; V39 N8

IRIS ACCESSION NUMBER: EW012472

PUBLICATION DATE: 85

TITLE: HOW TO ANALYZE NEEDS.

PERSONAL AUTHOR: BIRNBRAVER, HERMAN; TYSON, LYNNE A.

DESCRIPTOR: *INSTRUCTION; *NEEDS ANALYSIS; *PLANNING; *TRAINING; *TRAINING PROGRAMS

DESCRIPTIVE NOTE: 53-55P.

ABSTRACT: SUGGESTIONS ARE GIVEN FOR CONDUCTING A NEEDS ANALYSIS.

AVAILABILITY: TRAINING AND DEVELOPMENT; V39 N8

IRIS ACCESSION NUMBER: EW012473

PUBLICATION DATE: 85

TITLE: BEYOND SELF-ACTUALIZATION: THE PERSUASION OF PYGMALION.

PERSONAL AUTHOR: BAXTER, GERALD D.; BOWERS, JOHN K.

DESCRIPTOR: *INSTRUCTION; *NEEDS ASSESSMENT; *PLANNING; *TRAINING; *TRAINING PROGRAMS

DESCRIPTIVE NOTE: 69-71P.

ABSTRACT: DEVELOPING TECHNICAL TRAINING FOR WHITE-COLLAR EMPLOYEES IS DESCRIBED.

AVAILABILITY: TRAINING AND DEVELOPMENT; V39 N8

IRIS ACCESSION NUMBER: EW012474
PUBLICATION DATE: 85

TITLE: PRIVATE CONTRACTS FOR PUBLIC WORK.

PERSONAL AUTHOR: CARTER, KAREN B.

DESCRIPTOR: *CONTRACT SERVICES; *COSTS; *MANAGEMENT; *MAINTENANCE; *OBJECTIVES; *OPERATIONS (WASTEWATER); *PERSONNEL; *TRENDS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 750-55P.

ABSTRACT: THIS ARTICLE DESCRIBES PRIVATE CONTRACTS FOR PUBLIC WORK, ESPECIALLY WASTEWATER TREATMENT. INCLUDED IN THE DISCUSSION ARE TRENDS, OBJECTIVES, OBSTACLES, AND VARIATIONS.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N7

IRIS ACCESSION NUMBER: EW012475

PUBLICATION DATE: 85

TITLE: HOW TO PUT MORE "PUBLIC" INTO PUBLIC WORKS.

PERSONAL AUTHOR: DECKER, THOMAS E.; SAIGER, LINDA J.

DESCRIPTOR: *DECISION MAKING; *EDUCATION; *INVOLVEMENT; *MANAGEMENT; *PLANNING; *POLICIES; *PUBLIC PARTICIPATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 756-62P.

ABSTRACT: THIS ARTICLE DESCRIBES WAYS OF INCREASING PUBLIC INVOLVEMENT IN PUBLIC ACTIVITIES. EXAMPLES OF SOME ACTIVITIES ARE DESCRIBED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N7

IRIS ACCESSION NUMBER: EW012476

PUBLICATION DATE: 85

TITLE: OPERATIONAL DYNAMICS AND CONTROL OF SECONDARY CLARIFIERS.

PERSONAL AUTHOR: KEINATH, THOMAS M.

DESCRIPTOR: *CLARIFIERS; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PROCESS CONTROLS; *TROUBLESHOOTING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 770-76P.

ABSTRACT: TWO STRATEGIES EFFECTIVE FOR COPING WITH OVERLOADED CLARIFIERS ARE RECYCLE RATE CONTROL AND STEP FEED CONTROL. THE CONTROL STRATEGIES ARE DISCUSSED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N7

IRIS ACCESSION NUMBER: EW012477

PUBLICATION DATE: 85

TITLE: PILOT TESTS OF CHLORINATION FACILITY FOR DISINFECTING SECONDARY EFFLUENT.

PERSONAL AUTHOR: HUANG, JERRY Y. C.; AND OTHERS

DESCRIPTOR: *COSTS; *CHLORINATION; *DISINFECTION; *EFFLUENT; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *PILOT STUDIES; *SECONDARY EFFLUENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 777-84P.

ABSTRACT: IMPROVED MIXING LESSENS CHLORINE RESIDUALS AND SULFER DIOXIDE REQUIREMENTS FOR DECHLORINATION, BUT THE HIGHER ENERGY COSTS MAY NOT COMPENSATE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N7

IRIS ACCESSION NUMBER: EW012478

PUBLICATION DATE: 85

TITLE: FIELD STUDIES OF THE OVERLAND FLOW PROCESS FOR THE TREATMENT OF RAW AND PRIMARY TREATED MUNICIPAL WASTEWATER.

PERSONAL AUTHOR: SMITH, ROBERT G.; SCHROEDER, EDWARD D.

DESCRIPTOR: *FIELD STUDIES; *LAND APPLICATION; *LAND USE; *MODELS; *OPERATIONS (WASTEWATER); *OVERLAND FLOW PROCESS; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 785-94P.

ABSTRACT: MODEL STUDIES BASED ON SLOPE LENGTH AND APPLICATION RATE LEAD TO PREDICTIONS OF SMALLER LAND REQUIREMENTS THAN CURRENT DESIGN GUIDELINES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N7

IRIS ACCESSION NUMBER: EW012479

PUBLICATION DATE: 85

TITLE: RESPONSE OF PHENOL-ACCLIMATED ACTIVATED SLUDGE PROCESS TO QUANTITATIVE SHOCK LOADING.

PERSONAL AUTHOR: ROZICH, A. F.; GAUDY, JR., A. F.
DESCRIPTOR: *ACTIVATED SLUDGE PROCESS; *MODELS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *PROCESS EVALUATION; *SHOCK LOADS; *TOXIC SUBSTANCES; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 795-804P.

ABSTRACT: TWO SPECIFIC GROWTH RATES ARE IMPORTANT IN STEADY-STATE TREATMENT OF TOXICS, BUT ARE EVEN MORE CRITICAL FOR SYSTEMS THAT UNDERGO SHOCK LOADINGS. THIS STUDY WAS DESIGNED TO EXAMINE EXPERIMENTALLY THE POSTULATED SENSITIVITY OF A SYSTEM TREATING TOXIC WASTES TO QUANTITATIVE SHOCK LOADS AND TO COMPARE THE RESPONSE OF SUCH A SYSTEM TO THAT OF COMPARABLY OPERATED SYSTEMS TREATING A NONTOXIC WASTE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N7

IRIS ACCESSION NUMBER: EW012480

PUBLICATION DATE: 85

TITLE: CHARACTERIZATION OF THE SIZE DISTRIBUTION OF CONTAMINANTS IN WASTEWATER: TREATMENT AND REUSE IMPLICATIONS.

PERSONAL AUTHOR: LEVINE, AUDREY D.; AND OTHERS

DESCRIPTOR: *CONTAMINANTS; *DESIGN; *FACILITIES; *OPERATIONS (WASTEWATER); *ORGANIC CONTAMINANTS; *PARTICLE SIZE; *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 805-16P.

ABSTRACT: INCORPORATING PARTICLE SIZE ANALYSIS INTO THE DESIGN PROCESSES CAN RESULT IN INNOVATIVE TREATMENT FACILITIES.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N7

IRIS ACCESSION NUMBER: EW012481

PUBLICATION DATE: 85

TITLE: INFRARED THERMOGRAPHY HELPS IDENTIFY SEWER TROUBLE SPOTS.

DESCRIPTOR: *EQUIPMENT; *INSPECTION; *INFRARED THERMOGRAPHY; *MAINTENANCE; *OPERATIONS (WASTEWATER); *SEWERS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 18P.

ABSTRACT: INFRARED THERMOGRAPHY CAN BE USED TO IDENTIFY SEWER TROUBLE SPOTS. USE OF SUCH EQUIPMENT IN ST. LOUIS IS DESCRIBED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N7

IRIS ACCESSION NUMBER: EW012482

PUBLICATION DATE: 85

TITLE: CALCULATOR PROGRAM SPEEDS PUMP DESIGN.

PERSONAL AUTHOR: ERICHSEN, KURT, P.E.

DESCRIPTOR: *CALCULATORS; *CALCULATOR PROGRAMS; *CALCULATOR SOFTWARE; *DESIGN; *PUMPS; *PIPE NETWORKS

DESCRIPTIVE NOTE: 19P.

ABSTRACT: DESCRIBED IS A CALCULATOR PROGRAM FOR THE HP-41C TO DETERMINE THE TOTAL DYNAMIC PUMPING HEAD IN COMPLEX PIPE NETWORKS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N7

IRIS ACCESSION NUMBER: EW012483

PUBLICATION DATE: 85

TITLE: ON-LINE PARTICLE COUNTING IMPROVES FILTER EFFICIENCY.

PERSONAL AUTHOR: HUTCHINSON, C. WILLIAM

DESCRIPTOR: *COMPUTER APPLICATIONS; *DRINKING WATER; *FILTRATION; *INSTRUMENTATION; *NEVADA; *OPERATIONS (WATER); *PARTICLE COUNTING; *PROCESS CONTROLS; *WATER TREATMENT

DESCRIPTIVE NOTE: 20-25P.

ABSTRACT: THE WATER TREATMENT PLANT SUPPLYING LAS VEGAS AND SURROUNDING COMMUNITIES USES AN INNOVATIVE METHOD FOR CONTROLLING THE FILTER PROCESS. SPECIAL INSTRUMENTATION IS TIED INTO THE MAIN DISTRIBUTED PROCESS CONTROL SYSTEM.

AVAILABILITY: WATER ENGINNERING AND MANAGEMENT; V132 N7

IRIS ACCESSION NUMBER: EW012484

PUBLICATION DATE: 85

TITLE: TEXAS BOOMTOWN GETS NEW GUSHER.

PERSONAL AUTHOR: BURROWS, ROBERT C.

DESCRIPTOR: *CLARIFIERS; *DRINKING WATER; *EQUIPMENT; *OPERATIONS (WATER); *WATER TREATMENT

DESCRIPTIVE NOTE: 26-28P.

ABSTRACT: AS PART OF A MAJOR EXPANSION, A HIGH-RATE CLARIFIER WAS RETROFITTED TO THE EXISTING WATER TREATMENT

SYSTEM IN A TEXAS COMMUNITY.
AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N7

IRIS ACCESSION NUMBER: EW012485

PUBLICATION DATE: 85

TITLE: ADVANCED TECHNOLOGY MAKES MOUNTAIN RUN-OFF MORE PALATABLE.

PERSONAL AUTHOR: POWELL, WILLIAM

DESCRIPTOR: *COLORADO; *DRINKING WATER; *FACILITIES; *FILTRATION; *OPERATIONS (WATER); *PACKAGED TREATMENT PLANTS; *WATER TREATMENT

DESCRIPTIVE NOTE: 30-31P.

ABSTRACT: A PACKAGED WATER TREATMENT SYSTEM HANDLES HIGH TURBIDITY LEVELS IN A COLORADO MOUNTAIN COMMUNITY.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N7

IRIS ACCESSION NUMBER: EW012486

PUBLICATION DATE: 85

TITLE: SECRETS TO THE SUCCESS OF ANAEROBIC DIGESTION.
PERSONAL AUTHOR: JERIS, JOHN S.; KUGELMAN, IRWIN J.

DESCRIPTOR: *ANAEROBIC DIGESTION; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 32-35P.

ABSTRACT: WITH PROPER OPERATION AND MAINTENANCE ATTENTION, ANAEROBIC DIGESTION CAN BE APPLIED FAVORABLY TO WASTEWATER TREATMENT.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N7

IRIS ACCESSION NUMBER: EW012487

PUBLICATION DATE: 85

TITLE: THE STABILITY OF COLOR PRINTS.

PERSONAL AUTHOR: KRAUSE, PETER

DESCRIPTOR: *COLOR; *COLOR PRINTS; *PHOTOGRAPHY; *SHELF LIFE

DESCRIPTIVE NOTE: 28-31, 58-59P.

ABSTRACT: DISCUSSED ARE VARIABLES AFFECTING THE STABILITY OF COLOR PRINTS. SUGGESTIONS ARE PROVIDED FOR EXTENDING THE LIFE OF THE COLOR.
AVAILABILITY: TECHNICAL PHOTOGRAPHY; V17 N7

IRIS ACCESSION NUMBER: EW012488

PUBLICATION DATE: 85

TITLE: SAN DIEGO'S TOTAL RESOURCE RECOVERY PROGRAM: PROTOTYPE FOR THE FUTURE?

DESCRIPTOR: AGRICULTURE; *CALIFORNIA; DRINKING WATER; INDUSTRY; *NATURAL RESOURCES; *OPERATIONS (WASTEWATER); *OPERATIONS (WATER); *RECYCLING; *RESOURCE RECOVERY; *WATER REUSE; *WATER TREATMENT; *WASTEWATER TREATMENT; *WATER RESOURCES

DESCRIPTIVE NOTE: 28-30, 108-10P.

ABSTRACT: DESCRIBED IS THE RESOURCE RECOVERY PROGRAM OF SAN DIEGO, CALIFORNIA, FOR OBTAINING WATER FROM A VARIETY OF SOURCES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N7

IRIS ACCESSION NUMBER: EW012489

PUBLICATION DATE: 85
TITLE: THE CURRENT STATUS OF DENVER'S POTABLE WATER REUSE PROJECT.

PERSONAL AUTHOR: LAUER, WILLIAM C.; AND OTHERS

DESCRIPTOR: *COLORADO; DRINKING WATER; *NATURAL RESOURCES; *OPERATIONS (WASTEWATER); *OPERATIONS (WATER); *RESOURCE RECOVERY; *RECYCLING; *WATER REUSE; *WATER TREATMENT; *WASTEWATER TREATMENT; *WATER RESOURCES

DESCRIPTIVE NOTE: 52-59P.

ABSTRACT: DENVER'S POTABLE REUSE DEMONSTRATION PLANT WILL HELP DETERMINE THE FEASIBILITY OF DIRECT REUSE. THE PROJECT IS DESCRIBED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N7

IRIS ACCESSION NUMBER: EW012490

PUBLICATION DATE: 85

TITLE: WATER REUSE IN CALIFORNIA.

PERSONAL AUTHOR: CROOK, JAMES

DESCRIPTOR: *AGRICULTURE; *CALIFORNIA; *GROUNDWATER;

*IRRIGATION; *NATURAL RESOURCES; *OPERATIONS (WASTEWATER); *OPERATIONS (WATER); *PUBLIC HEALTH; *RESOURCE RECOVERY; *RECYCLING; *REGULATIONS; *WASTEWATER TREATMENT; *WATER TREATMENT; *WATER RESOURCES

DESCRIPTIVE NOTE: 60-71P.

ABSTRACT: PROTECTING THE PUBLIC HEALTH WHILE ENCOURAGING THE USE OF RECLAIMED WATER CHALLENGES CALIFORNIA'S DEPARTMENT OF HEALTH SERVICES. DESCRIBED ARE SOME OF THE POTENTIAL PROBLEMS IN THE USE OF RECLAIMED WATER, REGULATIONS AFFECTING USE, AND TYPES OF USE.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N7

IRIS ACCESSION NUMBER: EW012491

PUBLICATION DATE: 85

TITLE: OBTAINING PUBLIC SUPPORT FOR REUSE WATER.

PERSONAL AUTHOR: BRUVOLD, WILLIAM H.

DESCRIPTOR: *ATTITUDES; *BEHAVIOR CHANGE; DRINKING WATER; *EDUCATIONAL PROGRAMS; *PUBLIC ATTITUDES; RECYCLING; RESOURCE RECOVERY; SURVEYS; *WATER REUSE; WATER SUPPLY; WATER RESOURCES

DESCRIPTIVE NOTE: 72-77P.

ABSTRACT: RECOMMENDATIONS ARE MADE FOR ACHIEVING PUBLIC ACCEPTANCE OF POTABLE REUSE WATER. THE RECOMMENDATIONS ARE BASED ON THE RESULTS OF SEVERAL SURVEYS.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N7

IRIS ACCESSION NUMBER: EW012492

PUBLICATION DATE: 85

TITLE: PAYING FOR REUSE WATER.

PERSONAL AUTHOR: CORSSMIT, C. (KEES) W.

DESCRIPTOR: *BENEFITS; *COSTS; *ECONOMICS; WATER RATES; *WATER REUSE; *WATER RESOURCES; WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 78-83P.

ABSTRACT: DEVELOPING RATES FOR REUSE WATER ADDS COMPLEXITY TO THE COST-OF-SERVICE PHILOSOPHY. METHODS OF ARRIVING AT RATES ARE DISCUSSED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N7

IRIS ACCESSION NUMBER: EW012493

PUBLICATION DATE: 85

TITLE: RECLAIMING DESERT LANDS THROUGH WATER REUSE.

PERSONAL AUTHOR: GOFF, JAMES D.; BUSCH, PAUL L.

DESCRIPTOR: *ARIZONA; *EFFLUENT REUSE; *PROJECT DESCRIPTIONS; RECYCLING; RESOURCE RECOVERY; *WATER REUSE; WATER TREATMENT; *WASTEWATER TREATMENT; *WATER RESOURCES

DESCRIPTIVE NOTE: 84-87P.

ABSTRACT: THE FIRST PHASE OF A PLAN FOR COMPLETE REUSE OF WASTEWATER FROM CHANDLER, ARIZONA, WILL BE OPERATIONAL BY THE END OF 1985. THE PROJECT IS DESCRIBED IN THIS ARTICLE.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N7

IRIS ACCESSION NUMBER: EW012494

PUBLICATION DATE: 85

TITLE: HEALTH EFFECTS OF INDIRECT POTABLE WATER REUSE.

PERSONAL AUTHOR: NELLOR, MARGARET H.; AND OTHERS

DESCRIPTOR: *CALIFORNIA; *HEALTH EFFECTS; *PUBLIC HEALTH; *RESEARCH REPORTS; *RECYCLING; RESOURCES RECOVERY; *WATER REUSE; *WATER SUPPLY; WATER RESOURCES; WATER TREATMENT; *WASTEWATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 88-96P.

ABSTRACT: A BLEND OF RECLAIMED WATER, IMPORTED RIVER WATER, AND STORMWATER CURRENTLY USED FOR GROUNDWATER REPLENISHMENT WAS FOUND TO HAVE NO MEASURABLE EFFECT ON WATER QUALITY OR ON HUMAN HEALTH.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N7

IRIS ACCESSION NUMBER: EW012495

PUBLICATION DATE: 85

TITLE: BACTERIAL ADHESION AND FOULING OF REVERSE OSMOSIS MEMBRANES.

PERSONAL AUTHOR: RIDGWAY, HARRY F.; AND OTHERS

DESCRIPTOR: *BACTERIA; *CALIFORNIA; OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *RECYCLING; *REVERSE OSMOSIS; *RESEARCH REPORTS; WATER TREATMENT; *WASTEWATER TREATMENT; *WATER REUSE; WATER QUALITY

DESCRIPTIVE NOTE: 97-106P.

ABSTRACT: HYDROPHOBIC INTERACTIONS BETWEEN BACTERIAL CELLS AND CELLULOSE ACETATE SEEM TO BE A FACTOR IN THE FORMATION OF BIOFILM ON RO MEMBRANES.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N7

IRIS ACCESSION NUMBER: EW012496

PUBLICATION DATE: 84

TITLE: THE SELECTION OF CHEMICAL PROTECTION SUITS FOR SPILL EMERGENCIES.

PERSONAL AUTHOR: FINGAS, MERVIN F.; VANCHUK, J. T.

DESCRIPTOR: *CHEMICALS; *CHEMICAL PROTECTION SUITS; *CHEMICAL SPILL RESPONSE; *CHEMICAL SPILLS; *HAZARDOUS MATERIALS; *PROTECTIVE CLOTHING; *RECOMMENDATIONS; *SAFETY; *SPILLS; *SPILL EMERGENCIES; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 54-71P.

ABSTRACT: THIS ARTICLE DETAILS THE TWO IMPORTANT CRITERIA FOR THE SELECTION OF CHEMICAL PROTECTION SUITS; CHEMICAL COMPATIBILITY AND CONFIGURATION. RECOMMENDATIONS FOR CLOTHING MATERIALS ARE GIVEN.

AVAILABILITY: SPILL TECHNOLOGY NEWSLETTER; V9(3-6)

IRIS ACCESSION NUMBER: EW012497

PUBLICATION DATE: 84

TITLE: IN-SITU BURNING OF UNCONTAINED OIL SLICKS.

PERSONAL AUTHOR: LAPERRIERE, F.

DESCRIPTOR: *CANADA; *BURNING; *OIL SLICKS; *OPEN WATER; *PERFORMANCE EVALUATION; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 72-73P.

ABSTRACT: THIS ARTICLE IS A BRIEF REVIEW OF ENVIRONMENTAL PROTECTION SERVICE WORK IN CANADA RELATED TO IN-SITU COMBUSTION.

AVAILABILITY: SPILL TECHNOLOGY NEWSLETTER; V9(3-6)

IRIS ACCESSION NUMBER: EW012498

PUBLICATION DATE: 85

TITLE: SPECIAL REPORT ON AIR TOXICS: MEASURING AND MONITORING.

PERSONAL AUTHOR: CHEREMISINOFF, PAUL N.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *AIR POLLUTION; *AIR POLLUTION CONTROL; *INSTRUMENTS; *MONITORING; *EQUIPMENT; *POLLUTION CONTROL; *SAMPLING

DESCRIPTIVE NOTE: 21-29P.

ABSTRACT: THIS ARTICLE DESCRIBES INSTRUMENTS AVAILABLE FOR SAMPLING AND MONITORING EMISSIONS THAT MIGHT AFFECT AIR QUALITY.

AVAILABILITY: POLLUTION ENGINEERING; V17 N6

IRIS ACCESSION NUMBER: EW012499

PUBLICATION DATE: 85

TITLE: TECHNIQUES FOR AIR POLLUTION ANALYSIS.

PERSONAL AUTHOR: RICH, GERALD

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *AIR POLLUTION CONTROL; *COSTS; *LABORATORY PROCEDURES; *MEASUREMENT; *MONITORING; *SAMPLING; *POLLUTION CONTROL

DESCRIPTIVE NOTE: 43-44P.

ABSTRACT: DESCRIBED AND LISTED ARE MANY OF THE TECHNIQUES AVAILABLE FOR THE MEASUREMENT OF AIR POLLUTANTS. A TABLE IS INCLUDED PROVIDING THE METHODS, USES, SENSITIVITY, ACCURACY, SELECTIVITY, AND COST.

AVAILABILITY: POLLUTION ENGINEERING; V17 N6

IRIS ACCESSION NUMBER: EW012500

PUBLICATION DATE: 85

TITLE: AIR TOXICS UPDATE.

PERSONAL AUTHOR: HUNT, GARY T.; EGAN, BRUCE A.

DESCRIPTOR: *AIR POLLUTION; *AIR POLLUTION CONTROL; *CHEMICALS; *FEDERAL ROLE; *MODELS; *MONITORING; *REGULATIONS; *STATE ROLE; *TOXIC SUBSTANCEES

DESCRIPTIVE NOTE: 46-52P.

ABSTRACT: THIS ARTICLE PROVIDES AN UPDATE ON THE STATUS OF STATE AND FEDERAL TOXIC AIR POLLUTANT CONTROL PROGRAMS. THE DISCUSSION INCLUDES REGULATIONS, CHEMICAL CATEGORIES, MODELING AND MONITORING.

AVAILABILITY: POLLUTION ENGINEERING; V17 N6

IRIS ACCESSION NUMBER: EW012502

PUBLICATION DATE: 85

TITLE: DISKS, DISKS, DISKS FOR THE LABORATORY PART 1.

PERSONAL AUTHOR: DESSY, RAYMOND E.

DESCRIPTOR: *CHEMICAL ANALYSIS; *CHEMISTRY; *COMPUTERS; *COMPUTER APPLICATIONS; *COMPUTER STORAGE DEVICES; *MAGNETIC TAPES; *VIDEODISC RECORDINGS

DESCRIPTIVE NOTE: 692A-708AP.

ABSTRACT: EXAMINES THE VOCABULARY AND CHEMISTRY OF MAGNETIC- AND OPTICAL-DISK STORAGE TECHNOLOGIES AS WELL AS THEIR APPLICATIONS TO THE ANALYTICAL LABORATORY. THIS INFORMATION WILL ALLOW CHEMISTS TO SELECT THE PROPER DISK SYSTEMS FOR THEIR LABORATORIES AND TO EVALUATE VENDORS' CLAIMS.

AVAILABILITY: ANALYTICAL CHEMISTRY; V57 N6

IRIS ACCESSION NUMBER: EW012503

PUBLICATION DATE: 85

TITLE: SOFTWARE-DRIVEN INSTRUMENTATION: THE NEW WAVE.

PERSONAL AUTHOR: SALIT, M. L.; PARSONS, M. L.

DESCRIPTOR: *CHEMISTRY; *CHEMICAL ANALYSIS; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *INSTRUMENTATION; *LABORATORY PROCEDURES

DESCRIPTIVE NOTE: 715A-729AP.

ABSTRACT: SOFTWARE-DRIVEN INSTRUMENTATION MAKES MEASUREMENTS THAT DEMAND A COMPUTER AS AN INTEGRAL PART OF EITHER CONTROL, DATA ACQUISITION, OR DATA REDUCTION. THE STRUCTURE OF SUCH INSTRUMENTATION, HARDWARE REQUIREMENTS, AND SOFTWARE REQUIREMENTS ARE DISCUSSED. EXAMPLES OF SOFTWARE-DRIVEN INSTRUMENTATION (SUCH AS A WAVELENGTH-MODULATED CONTINUUM SOURCE MULTIELEMENT ATOMICS ABSORPTION SPECTROMETRY SYSTEM) ARE INCLUDED.

AVAILABILITY: ANALYTICAL CHEMISTRY; V57 N6

IRIS ACCESSION NUMBER: EW012504

PUBLICATION DATE: 85

TITLE: PUMPS HEART OF A TREATMENT PLANT.

DESCRIPTOR: *EQUIPMENT; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PUMPS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 14-17P.

ABSTRACT: DESCRIBED ARE THE FIVE MAIN TYPES OF PUMPS USED IN WASTEWATER PLANTS. INSPECTION, OVERHAUL, PROTECTION OF PUMPS, AND OTHER ITEMS ARE DISCUSSED.

AVAILABILITY: OPERATIONS FORUM; V2 N6

IRIS ACCESSION NUMBER: EW012505

PUBLICATION DATE: 85

TITLE: PUMP MAINTENANCE DETROIT STYLE.

DESCRIPTOR: *EQUIPMENT; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PUMPS

DESCRIPTIVE NOTE: 18-21P.

ABSTRACT: THIS ARTICLE PROVIDES A STEP-BY-STEP TEAR-DOWN OF A PUMP. PHOTOGRAPHS PROVIDE VIEWS OF EACH STEP.

AVAILABILITY: OPERATIONS FORUM; V2 N6

IRIS ACCESSION NUMBER: EW012506

PUBLICATION DATE: 85

TITLE: SLUDGE COMPOSTING-LEARNING FROM EXPERIENCE.

PERSONAL AUTHOR: YEAMAN, BARBARA; WALKER, JOHN

DESCRIPTOR: COMMUNITY RELATIONS; *COMPOSTING; DESIGN; *FACILITIES; *OPERATIONS (WASTEWATER); PUBLIC RELATIONS; *SLUDGE; *SLUDGE COMPOSTING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 22-25P.

ABSTRACT: THIS IS THE THIRD IN A SERIES OF THREE ARTICLES ABOUT THE DESIGN, OPERATION, AND PUBLIC ACCEPTANCE OF WASTEWATER SLUDGE COMPOSTING FACILITIES. THIS ARTICLE CONSIDERS COMMUNITY RELATIONSHIPS AND PROVIDES A SUMMARY OF THE SERIES.

AVAILABILITY: OPERATIONS FORUM; V2 N6

IRIS ACCESSION NUMBER: EW012507

PUBLICATION DATE: 85

TITLE: MICROCOMPUTER SOFTWARE PRACTICE PERFORMANCE ANALYSIS.

PERSONAL AUTHOR: BLACKWELL, LARRY G.; LANGWORTHY, VIRGIL W.

DESCRIPTOR: *COMPUTERS; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *CONTROL SYSTEMS; *MANAGEMENT; *OPERATIONS (WASTEWATER); *REPORTING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 22P.

ABSTRACT: DESCRIBED ARE THE CHARACTERISTICS AND USES OF AN OFF-LINE CONTROL SYSTEM FOR WASTEWATER TREATMENT PLANTS. OPERATORS AND MANAGERS CAN USE THE DATA FOR MODIFICATION IN TREATMENT AS WELL AS FOR PREPARING REPORTS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N6

IRIS ACCESSION NUMBER: EW012508

PUBLICATION DATE: 85

TITLE: COMPUTER SYSTEM HANDLES COMPLEX WATER TREATMENT NEEDS.

DESCRIPTOR: *COMPUTERS; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *CONTROL SYSTEMS; *MANAGEMENT; *MINNESOTA; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 24P.

ABSTRACT: DESCRIBED IS THE COMPUTER OPERATION TO MONITOR AND CONTROL WASTEWATER TREATMENT IN ROCHESTER, MINNESOTA. THE PLANT IS DIVIDED INTO SIX TREATMENT PROCESS AREAS CONTROLLED BY INDIVIDUAL MICROPROCESSORS; THESE COMMUNICATE WITH DUAL HOST COMPUTERS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N6

IRIS ACCESSION NUMBER: EW012509

PUBLICATION DATE: 85

TITLE: COMPUTERIZATION CAN BOOST UTILITY PERFORMANCE.

PERSONAL AUTHOR: SHELL, RICHARD L.; DAMACHI, NICHOLAS A.

DESCRIPTOR: ADMINISTRATION; *COMPUTERS; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *INFORMATION SYSTEMS; CONTROL SYSTEMS; COSTS; MANAGEMENT; ENGINEERING; *OPERATIONS (WATER); REPORTING; *WATER DISTRIBUTION; *WATER SUPPLY; *WATER TREATMENT

DESCRIPTIVE NOTE: 30-33P.

ABSTRACT: MINI-AND MICROCOMPUTERS OFFER TIMELY INFORMATION TO HELP ENHANCE WATER UTILITY MANAGEMENT. DESCRIBED ARE WAYS TO IMPROVE PERFORMANCE USING THESE TOOLS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N6

IRIS ACCESSION NUMBER: EW012510

PUBLICATION DATE: 85

TITLE: PUMPS CRUCIAL TO SUCCESS OF LONG-DISTANCE AQUEDUCTS.

PERSONAL AUTHOR: KARASSIK, IGOR

DESCRIPTOR: *DESIGN; *EQUIPMENT; *OPERATIONS (WATER); *PUMPS; *PUMPING STATIONS; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 35-38P.

ABSTRACT: TAPPING WATER SOURCES IN INCREASINGLY REMOTE AREAS MEANS MORE COMPLEX FACTORS MUST BE CONSIDERED IN SELECTING PUMPING SYSTEMS. DESCRIBED ARE SOME OF THE VARIABLES TO CONSIDER.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N6

IRIS ACCESSION NUMBER: EW012511

PUBLICATION DATE: 85

TITLE: ENUMERATING INJURED COLIFORMS IN DRINKING WATER.

PERSONAL AUTHOR: LE CHEVALLIER, MARK W.; MCFETERS, GORDON A.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BACTERIA; *BIOLOGICAL INDICATORS; *COLIFORMS; *DRINKING WATER; *HEALTH; *LITERATURE REVIEWS; *RECOMMENDATIONS; *SAMPLING; *STRESSED BACTERIA; *WATER QUALITY

DESCRIPTIVE NOTE: 81-87P.

ABSTRACT: IMPLEMENTATION OF A SENSITIVE ENUMERATION TECHNIQUE CAPABLE OF DETECTING INJURED AS WELL AS UNSTRESSED COLIFORMS WOULD LIKELY RESULT IN FEWER OCCURENCES OF WATERBORN DISEASE. SOURCES OF INJURY, FACTORS INFLUENCING THE EXTENT OF INJURY, PROBLEMS IN MEASUREMENT, AND HEALTH IMPLICATIONS ARE DISCUSSED. RECOMMENDATIONS FOR FUTURE RESEARCH ARE INCLUDED.

AVAILABILITY: AMERICAN WATER WORKS ASSOCIATION JOURNAL; V77 N6

IRIS ACCESSION NUMBER: EW012512

PUBLICATION DATE: 85

TITLE: SITING - A PERSISTENT ENVIRONMENTAL ISSUE.

PERSONAL AUTHOR: BROWN, SANFORD M., PH. D.

DESCRIPTOR: *ENVIRONMENTAL ISSUES; *FACILITIES; *INSPECTION; *LAND USE; *RECOMMENDATIONS; *REGULATIONS; *SITING

DESCRIPTIVE NOTE: 7-9P.

ABSTRACT: DISCUSSED ARE VARIOUS ASPECTS OF SITING FACILITIES. METHODS TO IMPROVE THE PRACTICE ARE PRESENTED.

AVAILABILITY: JOURNAL OF ENVIRONMENTAL HEALTH; V48 N1

IRIS ACCESSION NUMBER: EW012513

PUBLICATION DATE: 85

TITLE: TEMPERATURE EFFECTS ON ONSITE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS.

PERSONAL AUTHOR: VIRARAGHAVAN, T., PH. D., P. E.

DESCRIPTOR: *BIOLOGICAL PROCESSES; *ONSITE WASTEWATER TREATMENT; ONSITE DISPOSAL; *OPERATIONS (WASTEWATER); *TEMPERATURE EFFECTS; WASTE DISPOSAL; *WASTEWATER TREATMENT; *SEPTIC TANKS; *PACKAGE PLANTS

DESCRIPTIVE NOTE: 10-13P.

ABSTRACT: THIS PAPER BRIEFLY REVIEWS TEMPERATURE EFFECTS ON AEROBIC AND ANAEROBIC BIOLOGICAL PROCESSES RELEVENT TO ONSITE SYSTEMS.

AVAILABILITY: JOURNAL OF ENVIRONMENTAL HEALTH; V48 N1

IRIS ACCESSION NUMBER: EW012514

PUBLICATION DATE: 85

TITLE: USE OF IRON RODS TO DETERMINE THE DEPTH OF SEASONAL WATER TABLES FOR ABSORPTION FIELDS IN SEWAGE DISPOSAL SYSTEMS.

PERSONAL AUTHOR: SPINALE, FRANCIS G.; MCKEE, WILLIAM H., JR.

DESCRIPTOR: *ABSORPTION FIELDS; *MEASUREMENT TECHNIQUES; *ONSITE WASTEWATER TREATMENT; *ONSITE DISPOSAL; *SITE EVALUATION; *SEWAGE DISPOSAL SYSTEMS; *WATER TABLE; *WASTEWATER TREATMENT; *SEPTIC TANKS

DESCRIPTIVE NOTE: 26-27P.

ABSTRACT: COMPARISONS OF RUST FORMATION ON IRON RODS WITH RESULTS OBTAINED BY USING CONVENTIONAL PIEZOMETERS INDICATE THAT IRON RODS WILL ACCURATELY MEASURE THE AVERAGE DEPTH TO SEASONAL WATER TABLES FOR EVALUATION OF SITES FOR SEPTIC TANK ABSORPTION FIELDS.

AVAILABILITY: JOURNAL OF ENVIRONMENTAL HEALTH; V48 N1

IRIS ACCESSION NUMBER: EW012520

PUBLICATION DATE: 85

TITLE: THE PRETREATMENT CHALLENGE.

DESCRIPTOR: *CASE STUDIES; *INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *PRETREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 14-16P.

ABSTRACT: THIS ARTICLE PRESENTS INFORMATION ON PRETREATMENT IN GENERAL, SOME CASE STUDIES, AND SOME INNOVATIVE IDEAS FOR INDUSTRIAL PRETREATMENT.

AVAILABILITY: OPERATIONS FORUM; V2 N7

IRIS ACCESSION NUMBER: EW012521

PUBLICATION DATE: 85

TITLE: COMPUTER MANAGEMENT OF INDUSTRIAL WASTES.

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *DATABASES; *INDUSTRIAL WASTES; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PRETREATMENT; *RECORDKEEPING; *REPORTING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 17-18P.

ABSTRACT: DESCRIBED IS A COMPUTER SOFTWARE PROGRAM FOR DEVELOPING A DATABASE AND TRACKING INDUSTRIAL WASTE PRETREATMENT ACTIVITIES AND PERFORMANANCE. THE DATA CAN BE USED FOR MANAGEMENT AND REPORTING.

AVAILABILITY: OPERATIONS FORUM; V2 N7

IRIS ACCESSION NUMBER: EW012522

PUBLICATION DATE: 85

TITLE: PRETREATMENT PAPERWORK.

DESCRIPTOR: *MANAGEMENT; *OPERATIONS (WASTEWATER); *PRETREATMENT; *REPORTING; *RECORDKEEPING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 19-20P.

ABSTRACT: DISCUSSED IS THE DEVELOPMENT AND MAINTENANCE OF A RECORDS SYSTEM FOR PRETREATMENT.

AVAILABILITY: OPERATIONS FORUM; V2 N7

IRIS ACCESSION NUMBER: EW012523

PUBLICATION DATE: 85

TITLE: MONITORING PRODUCTS BUYERS GUIDE.

DESCRIPTOR: ANALYTICAL TECHNIQUES; *GUIDES; *EQUIPMENT; *GROUNDWATER; INSTRUMENTS; LABORATORY SERVICES; *MANUFACTURERS; *MONITORING; *SAMPLING; *WATER QUALITY

DESCRIPTIVE NOTE: 33-50P.

ABSTRACT: THIS GUIDE PRESENTS VARIOUS PRODUCTS FOR MONITORING AND SAMPLING GROUNDWATER. INFORMATION ON PRODUCTS OF VARIOUS MANUFACTURERS ARE DESCRIBED.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V5 N3

IRIS ACCESSION NUMBER: EW012524

PUBLICATION DATE: 85

TITLE: OPERATIONAL RANGES FOR SUCTION LYSIMETERS.

PERSONAL AUTHOR: EVERETT, LORNE G.; MCMILLION, LESLIE G.

DESCRIPTOR: *LYSIMETERS; *GROUNDWATER; *HAZARDOUS WASTES; *OPERATIONS; *SUCTION LYSIMETERS; *WATER QUALITY

DESCRIPTIVE NOTE: 51-60P.

ABSTRACT: THIS ARTICLE DESCRIBES THE PHYSICAL OPERATION OF A LYSIMETER, CHARACTERISTICS OF LYSIMETERS, AND SEVERAL QUESTIONS RELATED TO LYSIMETER OPERATION.

AVAILABILITY: GROUNDWATER MONITORING REVIEW; V5 N3

IRIS ACCESSION NUMBER: EW012525

PUBLICATION DATE: 85

TITLE: ANALYSIS OF VARIANCES AS DETERMINED FROM REPLICATES VS. SUCCESSIVE SAMPLING.

PERSONAL AUTHOR: MCBEAN, EDWARD A.; ROVERS, FRANK A.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *ANALYSIS OF VARIANCE; *GROUNDWATER; *MONITORING; *STATISTICS; *WATER QUALITY

DESCRIPTIVE NOTE: 61-64P.

ABSTRACT: THE INTENT OF THIS ARTICLE IS TO INDICATE, BY EXAMPLE, THE RELATIVE SOURCES OF VARIANCE AS DETERMINED BY FIELD SITE INVESTIGATION.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V5 N3

IRIS ACCESSION NUMBER: EW012526

PUBLICATION DATE: 85

TITLE: FACTORS REQUIRING RESOLUTION IN INSTALLING VADOSE ZONE MONITORING SYSTEMS.

PERSONAL AUTHOR: ROBBINS, GARY A.; GEMMELL, MICHAEL M.

DESCRIPTOR: *EQUIPMENT; *GROUNDWATER; HAZARDOUS WASTES; *MONITORING; SAMPLING; *VADOSE ZONE; *WATER QUALITY

DESCRIPTIVE NOTE: 75-80P.

ABSTRACT: DESCRIBED ARE VARIABLES RELATED TO THE INSTALLATION OF VADOSE ZONE MONITORING SYSTEMS.

AVAILABILITY: GROUND WATER MONITORING REVIEW; V5 N3

IRIS ACCESSION NUMBER: EW012527

PUBLICATION DATE: 85

TITLE: SOFT WATER, PLUMBING, AND TOXIC METALS.

DESCRIPTOR: *CORROSION; *DRINKING WATER; *METALS; *PLUMBING; *PRECIPITATION; *PIPES; *RESEARCH REPORTS; *TOXIC SUBSTANCES; *WATER SUPPLY; *RURAL AREAS; *SOFT WATER

DESCRIPTIVE NOTE: 2-6P.

ABSTRACT: REPORTED ARE THE RESULTS OF A STUDY CONDUCTED TO ASSESS THE METAL CORROSION PROBLEMS THAT MIGHT BE ASSOCIATED WITH COLLECTION AND USE OF PRECIPITATION FOR DRINKING WATER IN THE TENNESSEE VALLEY AREA.

AVAILABILITY: IMPACT TVA-NATURAL RESOURCES AND THE ENVIRONMENT; V8 N2

IRIS ACCESSION NUMBER: EW012528

PUBLICATION DATE: 84

TITLE: MODEL ORDINANCE FOR GROUNDWATER PROTECTION.

DESCRIPTOR: ENFORCEMENT; *GROUNDWATER; *MINNESOTA; *MODELS; *ORDINANCES; *STATE ROLE; *WASTE DISPOSAL; *WATER QUALITY; *WATER POLLUTION CONTROL; *WATER SUPPLY

DESCRIPTIVE NOTE: 331-49P.

ABSTRACT: THIS ARTICLE PRESENTS A MODEL ORDINANCE FOR GROUNDWATER PROTECTION IN MINNESOTA.

AVAILABILITY: THE ENVIRONMENTAL PROFESSIONAL; V6 N3 & 4

IRIS ACCESSION NUMBER: EW012529

PUBLICATION DATE: 85

TITLE: ANTIFREEZE IN SOLAR PANEL CONTAMINATES DRINKING WATER.

DESCRIPTOR: *ANTIFREEZE; *CONTAMINATION; *CROSS CONNECTIONS; *DRINKING WATER; ETHYLENE GLYCOL; HOT WATER; *PUBLIC HEALTH; *SOLAR PANELS; *WATER SUPPLY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 1, 3, 6P.

ABSTRACT: THIS ARTICLE DISCUSSES PROBLEMS ASSOCIATED WITH THE USE OF ETHYLENE GLYCOL IN SOLAR PANELS FOR HEATING WATER.

AVAILABILITY: BACKFLOW PREVENTION; V2 N6

IRIS ACCESSION NUMBER: EW012530
PUBLICATION DATE: 85

TITLE: RURAL CROSS CONNECTIONS - DANGER!

PERSONAL AUTHOR: JOHNSON, ROB

DESCRIPTOR: *CONTAMINATION; *CROSS CONNECTIONS; *DRINKING WATER; *PUBLIC HEALTH; *RURAL AREAS; *WATER SUPPLY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 4, 7P.

ABSTRACT: PROBLEMS ASSOCIATED WITH CROSS CONNECTIONS IN RURAL AREAS ARE DISCUSSED.

AVAILABILITY: BACKFLOW PREVENTION; V2 N6

IRIS ACCESSION NUMBER: EW012531

PUBLICATION DATE: 85

TITLE: NEW AND IMPROVED, OR JUST NEW?

PERSONAL AUTHOR: DOSSETT, DENNIS L.; KONCZAK, LEE J.

DESCRIPTOR: *COMPUTER ASSISTED INSTRUCTION; *INSTRUCTION; *RESEARCH REPORTS; *TRAINING

DESCRIPTIVE NOTE: 41-44P.
ABSTRACT: THIS ARTICLE PRESENTS RESEARCH RELATED TO COMPUTER ASSISTED INSTRUCTION FOR TRAINING AND THE RESULTS OF THE RESEARCH.

AVAILABILITY: TRAINING AND DEVELOPMENT; V39 N7

IRIS ACCESSION NUMBER: EW012532

PUBLICATION DATE: 85

TITLE: HAZARDOUS WASTE INCINERATION AT BAYER, AG.

PERSONAL AUTHOR: FUHR, HARTMUT

DESCRIPTOR: *BRINE SOLUTIONS; *FEDERAL REPUBLIC OF GERMANY; GERMANY; *HAZARDOUS WASTES; *INCINERATION; *ORGANIC COMPOUNDS; *PCBS; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 1-5P.

ABSTRACT: THIS PAPER DEALS WITH HAZARDOUS WASTE INCINERATION AT BAYER AG IN GENERAL AND IN MORE DETAIL WITH TWO SELECTED SPECIAL APPLICATIONS: PCB-INCINERATION AND INCINERATION OF BRINE SOLUTIONS CONTAINING ORGANIC COMPOUNDS.

AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2 N1

IRIS ACCESSION NUMBER: EW012533
PUBLICATION DATE: 85

TITLE: OPERATING THE ROTARY KILN INCINERATORS AT KOMMUNEKEMI.

PERSONAL AUTHOR: KRISTENSEN, ARNE

DESCRIPTOR: *DENMARK; *FACILITIES; *INCINERATORS; *OPERATIONS (WASTE DISPOSAL); *ROTARY KILNS; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 7-21P.

ABSTRACT: THIS PAPER DISCUSSES THE OPERATION OF TWO ROTARY KILN INCINERATOR SYSTEMS IN DENMARK. PREPARATION AND CONTROL OF THE WASTE TO ENSURE PROPER KILN OPERATION ARE DESCRIBED. OPERATIONAL EXPERIENCE AND PROBLEMS ARE DISCUSSED AND THE MAIN FACTORS INFLUENCING THE COSTS ARE MENTIONED.

AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2 N1

IRIS ACCESSION NUMBER: EW012534

PUBLICATION DATE: 85

TITLE: LOW PRESSURE REVERSE OSMOSIS MEMBRANES: CONCENTRATION AND TREATMENT OF HAZARDOUS WASTES.

PERSONAL AUTHOR: SILER, JEFFREY L.; BHATTACHARYYA, DIBAKAR
DESCRIPTOR: *CHEMICALS; *FILTRATION; *HAZARDOUS WASTES; *INDUSTRIAL WASTES; *MEMBRANES; *OPERATIONS (WASTEWATER); *ORGANIC COMPOUNDS; *REVERSE OSMOSIS; *WASTE DISPOSAL; *WASTE TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 45-65P.

ABSTRACT: THIS PAPER DEALS WITH THE USE OF LOW PRESSURE REVERSE OSMOSIS MEMBRANES FOR THE REMOVAL AND CONCENTRATION OF HAZARDOUS CONSITUENTS FROM SELECTED INDUSTRIAL WASTES.

AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2 N1

IRIS ACCESSION NUMBER: EW012535

PUBLICATION DATE: 85

TITLE: INTER- AND INTRALABORATORY ASSESSMENT OF SW-846 METHODS MANUAL FOR ANALYSIS OF APPENDIX VIII COMPOUNDS IN GROUNDWATER.

PERSONAL AUTHOR: STANKO, GEORGE H.; FORTINI, PETER E.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *CHEMICALS; *GROUNDWATER; *LABORATORY PROCEDURES; *EPA METHODS MANUALS; *PERFORMANCE EVALUATION; *USEPA; *WATER QUALITY

DESCRIPTIVE NOTE: 67-97P.

ABSTRACT: EPA METHODS 8240, 8270 (GC/MS), AND 8330 (HPLC) FROM SW-846 WERE EVALUATED AT THREE PROMINENT LABORATORIES FOR A SELECT LIST OF 36 COMPOUNDS THAT WERE SPIKED INTO A RELATIVELY SIMPLE GROUNDWATER MATRIX. RESULTS ARE REPORTED.

AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2 N1

IRIS ACCESSION NUMBER: EW012536

PUBLICATION DATE: 85

TITLE: DESIGN FOR CONTROL OF VOLATILE CHEMICAL EMISSIONS FROM SURFACE IMPOUNDMENTS.

PERSONAL AUTHOR: THIBO DEAUX, LOUIS J.; AND OTHERS

DESCRIPTOR: *CHEMICALS; *EMISSIONS; *CONTROL METHODS; *IMPOUNDMENTS; *MODELS; *POLLUTION CONTROL; *SURFACE IMPOUNDMENTS; *VOLATILE CHEMICALS; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 99-106P.

ABSTRACT: THE PURPOSE OF THIS PAPER IS TO ILLUSTRATE HOW A PROPER UNDERSTANDING OF THE CHEMODYNAMICS OF INTERPHASE CHEMICAL TRANSPORT COUPLED WITH AN INTREPRETATION OF THE RESULTING MATHEMATICAL MODEL CAN LEAD TO THE SELECTION OF EFFECTIVE VOLATILE CONTROL METHODS FOR SURFACE IMPOUNDMENTS.

AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2 N1

IRIS ACCESSION NUMBER: EW012537

PUBLICATION DATE: 85

TITLE: DETOXIFICATION PROCESS FOR A FERRIC CHLORIDE ETCHING WASTE.

PERSONAL AUTHOR: OBERKROM, S. L.; MARRERO, T. R.

DESCRIPTOR: *CHEMICALS; *ETCHING SOLUTIONS; *FERRIC CHLORIDE; *DETOXIFICATION; *INDUSTRIAL WASTES; *METALS; *NEUTRALIZATION; *WASTE DISPOSAL; *WASTE TREATMENT

DESCRIPTIVE NOTE: 107-12P.

ABSTRACT: THIS STUDY DEALS WITH THE NEUTRALIZATION AND DETOXIFICATION OF A SPENT FERRIC CHLORIDE ETCHING SOLUTION FROM THE MANUFACTURE OF NICKLE ALLOY HEATING ELEMENTS.

AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2 N1

IRIS ACCESSION NUMBER: EW012538
PUBLICATION DATE: 85

TITLE: SUMMARY AND ANALYSIS OF THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984.

PERSONAL AUTHOR: BEVERIDGE AND DIAMOND, P. C.

DESCRIPTOR: *FEDERAL REGULATIONS; *HAZARDOUS WASTES; *POLLUTION CONTROL; *RCRA; *REGULATIONS; *SOLID WASTES; *USEPA; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 113-30P.

ABSTRACT: THIS ARTICLE PROVIDES A SECTION-BY-SECTION SUMMARY AND ANALYSIS OF THE AMENDMENTS TO THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA). INCLUDED IS INFORMATION FROM THE JOINT EXPLANATORY STATEMENT OF THE COMMITTEE OF CONFERENCE (THE "CONFERENCE REPORT").

AVAILABILITY: HAZARDOUS WASTE AND HAZARDOUS MATERIALS; V2 N1

IRIS ACCESSION NUMBER: EW012539

PUBLICATION DATE: 85

TITLE: EFFICIENT SEARCH PROCEDURES FOR EXTREME POLLUTANT VALUES.

PERSONAL AUTHOR: CASEY, DON; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *EXTREME POLLUTANT VALUES; *MEASUREMENT; *MONITORING; *SAMPLING; *STATISTICS; *WATER QUALITY

DESCRIPTIVE NOTE: 165-76P.

ABSTRACT: THIS PAPER DEMONSTRATES AN EFFICIENT METHOD TO DETERMINE THE MAXIMUM SAMPLE MEASUREMENT FROM A FINITE SET OF SEQUENTIAL SAMPLES WITHOUT EXPLICITLY TESTING THEM ALL.

AVAILABILITY: ENVIRONMENTAL MONITORING AND ASSESSMENT; V5 N2

IRIS ACCESSION NUMBER: EW012540

PUBLICATION DATE: 85

TITLE: STATISTICAL DETERMINATION OF THE OPTIMAL SAMPLE SIZE OF SECONDARY EFFLUENT BOD5 AND SS.

PERSONAL AUTHOR: TSAI, ERIC C.

DESCRIPTOR: *ACTIVATED SLUDGE; *ANALYTICAL TECHNIQUES; *BOD; *EFFLUENTS; *MEASUREMENT; *SAMPLING; *STATISTICS; *WATER QUALITY

DESCRIPTIVE NOTE: 177-83P.

ABSTRACT: A STATISTICAL TECHNIQUE IS PRESENTED FOR DETERMINING THE OPTIMAL SAMPLE SIZE REQUIRED TO ESTIMATE THE TRUE GEOMETRIC MEAN WITH AN ALLOWABLE ERROR AT A DESIRED LEVEL OF CONFIDENCE.

AVAILABILITY: ENVIRONMENTAL MONITORING AND ASSESSMENT; V5 N2

IRIS ACCESSION NUMBER: EW012541

PUBLICATION DATE: 85

TITLE: COUNTY RESTORES GROUNDWATER AQUIFER.

PERSONAL AUTHOR: WELTON, RICHARD D.

DESCRIPTOR: *AQUIFER RESTORATION; *CONTAMINATION; *GROUNDWATER; *LANDFILLS; *WATER QUALITY; *WATER SUPPLY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 58-60P.

ABSTRACT: DESCRIBES TREATMENT MEASURES APPLIED WHEN GROUNDWATER DEGRADATION WAS CAUSED BY A REGIONAL LANDFILL.

AVAILABILITY: PUBLIC WORKS; V116 N7

IRIS ACCESSION NUMBER: EW012542

PUBLICATION DATE: 85

TITLE: STORMWATER MANAGEMENT EMPHASIZES "SOFT" IMPROVEMENTS.

PERSONAL AUTHOR: ENGOMOEN, MARC

DESCRIPTOR: *COLORADO; *DRAINAGE; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PLANNING; *STORMWATER; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 66-67P.

ABSTRACT: DEVELOPMENT OF A STORMWATER MANAGEMENT PROGRAM IN FORT COLLINS, COLORADO, PLACED EMPHASIS ON ESTHETICS AND OPEN SPACE CONSIDERATIONS. THIS ARTICLE DESCRIBES THE PROGRAM AND ITS FEATURES.

AVAILABILITY: PUBLIC WORKS; V116 N7

IRIS ACCESSION NUMBER: EW012543

PUBLICATION DATE: 85

TITLE: SOLVING ODOR PROBLEMS AT WET WELL PUMPING STATIONS.

DESCRIPTOR: *FLORIDA; *ODOR CONTROL; *ODORS; *OPERATIONS (WASTEWATER); *PUMP STATIONS; *PUMPS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 70P.

ABSTRACT: THE MIAMI DADE WATER AND SEWER AUTHORITY WAS ABLE TO CONTROL ODORS AT MORE THAN 300 PUMP STATIONS. PROCEDURES USED ARE DISCUSSED.

AVAILABILITY: PUBLIC WORKS; V116 N7

IRIS ACCESSION NUMBER: EW012554

PUBLICATION DATE: 85

TITLE: PREDICTION OF SELECTIVITY FOR ACTIVATED CARBON ADSORPTION OF TRACE ORGANIC (HOMOLOGUE) CONTAMINANTS.

PERSONAL AUTHOR: BELFORT, GEORGES

DESCRIPTOR: *ACTIVATED CARBON; *ADSORPTION; *CHEMICALS; *GASES; *LIQUIDS; *OPERATIONS (WASTEWATER); *ORGANIC COMPOUNDS; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *SOLVOPHOBIC THEORY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 69P. PRICE: $2.50

ABSTRACT: PREFERENTIAL ADSORPTION OF ORGANIC COMPOUNDS ONTO ACTIVATED CARBON FROM DILUTE AQUEOUS SOLUTIONS WAS STUDIED TO DEVELOP A COMPREHENSIVE THEORETICAL BASIS FOR PREDICTING ADSORPTION OF MULTICOMPONENT SOLUTES. THE INVESTIGATION INCLUDES A COMPARISON OF DIFFERENT CARBONS, THE ADSORPTION BEHAVIOR WITH VARIABLE AQUEOUS SOLUTION PROPERTIES, AND THE DIFFERENCES BETWEEN GAS AND LIQUID PHASE ADSORPTION. THE OVERALL OBJECTIVE WAS TO DEVELOP AND TEST THE COMPREHENSIVE SOLVOPHOBIC THEORY. THE DEVELOPMENT OF PREDICTIVE TECHNIQUES FOR MULTI-COMPONENT ADSORPTION BASED ON THE USE OF AN EQUATION OF STATE WERE COMPARED WITH THE IDEAL ADSORBED SOLUTION (IAS) THEORY USING COMPETITIVE PHENOL ADSORPTION DATA.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012555

PUBLICATION DATE: 85

TITLE: INFILTRATION/INFLOW: I/I ANALYSIS AND PROJECT CERTIFICATION.

DESCRIPTOR: *CONSTRUCTION GRANTS FUNDING; *FACILITIES; *INFILTRATION; *INFLOW; *MAINTENANCE; *PLANNING; *PROJECT CERTIFICATION; *SEWERS; *SEWER REHABILITATION; *WASTEWATER TREATMENT; *USEPA

DESCRIPTIVE NOTE: 8P. PRICE: $1.00

ABSTRACT: AS PART OF FACILITIES PLANNING FOR MUNICIPAL WASTEWATER TREATMENT FACILITIES, THE GRANTEE MUST DEMONSTRATE THAT CONTRIBUTING SEWER SYSTEMS ARE NOT, AND WILL NOT BE, SUBJECT TO EXCESSIVE INFILTRATION OR INFLOW. THIS BROCHURE INFORMS GRANTEES AND FACILITY PLANNERS ON HOW TO DETERMINE WHETHER EXCESSIVE I/I EXISTS, AND HOW TO CERTIFY THAT EXCESSIVE I/I HAS BEEN SUFFICIENTLY REDUCED

THROUGH SEWER REHABILITATION.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012556

PUBLICATION DATE: 85

TITLE: USE OF SEWAGE SLUDGE FOR FOREST-TREE SEEDLING PRODUCTION.

DESCRIPTOR: *AGRICULTURE; *FERTILIZER; *FORESTRY; *LAND APPLICATION; *PERFORMANCE EVALUATION; *RESEARCH REPORTS; *RECYCLING; *SEWAGE SLUDGE; *SLUDGE; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 115P. PRICE: $7.90

ABSTRACT: RESEARCH WAS UNDERTAKEN TO DETERMINE THE BENEFICIAL AND HARMFUL EFFECTS OF USING DEWATERED, DIGESTED SEWAGE SLUDGE IN: (1) CONTAINERIZED PRODUCTION OF FOREST TREE SEEDLINGS, (2) TREE SEEDLING PRODUCTION IN A CONVENTIONAL OUTDOOR NURSERY, (3) ESTABLISHMENT AND GROWTH OF TRANSPLANTED BARE-ROOT CONIFEROUS SEEDLINGS GROWN IN THE FIELD AS CHRISTMAS TREES, AND (4) FORMATION AND SURVIVAL OF MYCORRHIZAE ON FOREST TREES AND SOYBEANS. TREE SEEDLING PERFORMANCE WAS EVALUATED RELATIVE TO THE ABUNDANCES OF REQUIRED NUTRIENTS IN SLUDGE AS COMPARED WITH CONVENTIONAL FERTILIZATION PRACTICES. TOXICITIES OF VARIOUS ELEMENTS WERE DETERMINED, AS WERE SLUDGE-INDUCED NUTRIENT DEFICIENCIES ASSOCIATED WITH VARIOUS SLUDGE TYPES AND APPLICATION RATES. OPTIMUM LOADING RATES WERE DETERMINED TO MAXIMIZE SEEDLING SURVIVAL AND GROWTH IN THE FIELD AND TO MINIMIZE THE RISKS ASSOCIATED WITH AMMONIA AND HEAVY-METAL TOXICITIES.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012557

PUBLICATION DATE: 84

TITLE: REPORT ON THE IMPLEMENTATION OF SECTION 301(H).

DESCRIPTOR: *ADMINISTRATION; *CLEAN WATER ACT; *COMPLIANCE; *IMPLEMENTATION; *LAWS; *PROGRAM REVIEWS; *SECTION 301(H); *TECHNOLOGY; *WATER QUALITY; *USEPA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 97P. PRICE: $6.02

ABSTRACT: SECTION 301(H) OF THE CLEAN WATER ACT, AS AMENDED, PROVIDES FOR CASE-BY-CASE MODIFICATION OF SECONDARY TREATMENT REQUIREMENTS FOR DISCHARGES INTO MARINE WATERS BY PUBLICLY OWNED TREATMENT WORKS (POTWS)WHICH DEMONSTRATE THEIR COMPLIANCE WITH THE 301(H) CRITERIA. THIS REPORT ON THE IMPLEMENTATION OF SECTION 301(H) SUMMARIZES PROGRAM ACTIVITIES - ADMINISTRATIVE, LEGAL, TECHNICAL, AND DECISION MAKING - CONDUCTED BY EPA TO FULFILL THE INTENT OF SECTION 301(H), FROM 1978 TO MID 1984.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012558

PUBLICATION DATE: 85

TITLE: TECHNOLOGY ASSESSMENT OF INTERMITTENT SAND FILTERS.

DESCRIPTOR: *APPROPRIATE TECHNOLOGY; *COSTS; *FILTRATION; *FILTERS; *INTERMITTENT SAND FILTERS; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *RECOMMENDATIONS; *SAND FILTERS; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 37P. PRICE: $3.22

ABSTRACT: INTERMITTENT SAND FILTRATION OF WASTEWATER IS NOT A NEW TECHNOLOGY. RECENTLY, AS THE NEED FOR LOW COST FACILITIES IN RURAL AREAS HAS GROWN, INTERMITTENT FILTERS HAVE RECEIVED INCREASED USE AGAIN. THIS PUBLICATION CONTAINS INFORMATION ON THE FOLLOWING TOPICS: (1) TECHNOLOGY DESCRIPTION; (2) DEVELOPMENT STATUS; (3) TECHNOLOGY EVALUATION; (4) COMPARISON WITH EQUIVALENT TECHNOLOGY; (5) ASSESSMENT OF NATIONAL IMPACT; AND (6) RECOMMENDATIONS. SELECTED REFERENCES ARE INCLUDED.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012559

PUBLICATION DATE: 84

TITLE: A GUIDE TO INFORMATION SOURCES FOR WATER AND RELATED NATURAL RESOURCES.

PERSONAL AUTHOR: SUZANNE M. CLARK

DESCRIPTOR: BIBLIOGRAPHIES; *DATABASES; DIRECTORIES; *ENVIRONMENT; GUIDES; *INDEXES; *INFORMATION RESOURCES; *NATURAL RESOURCES; *SCIENCES; *SOCIAL SCIENCES; *VERMONT; WATER; *WATER RESOURCES

DESCRIPTIVE NOTE: 54P. PRICE: $7.00

ABSTRACT: THIS GUIDE WAS DESIGNED TO PRESENT A BROAD SPECTRUM OF INFORMATION SOURCES AVAILABLE FOR WATER AND RELATED NATURAL RESOURCES. PRINTED, COMPUTERIZED, NATIONAL, AND VERMONT STATE INFORMATION RESOURCES HAVE BEEN INCLUDED. ONLY THE PRIMARY INFORMATION SOURCES HAVE BEEN IDENTIFIED. NO ATTEMPT HAS BEEN MADE TO COMPILE A COMPREHENSIVE LIST OF ALL POSSIBLE SOURCES THAT MIGHT BE OF VALUE, BUT MANY REFERRAL SOURCES HAVE BEEN IDENTIFIED TO GUIDE THE RESEARCHER TO SOURCES NOT LISTED. THE GUIDE WAS PREPARED FOR WATER RESOURCES RELATED PROFESSIONALS IN THE STATE OF VERMONT, AND AS SUCH STRESSES RESOURCES AND SERVICES AVAILABLE THROUGH THE BAILEY/HOW LIBRARY, UNIVERSITY OF VERMONT AND THE VERMONT DEPARTMENT OF LIBRARIES.

AVAILABILITY: VERMONT WATER RESOURCES RESEARCH CENTER, SCHOOL OF NATURAL RESOURCES, GEORGE D. AIKEN CENTER, UNIVERSITY OF VERMONT, BURLINGTON, VT 05405

IRIS ACCESSION NUMBER: EW012560

PUBLICATION DATE: 83

TITLE: GUIDANCE MANUAL FOR POTW PRETREATMENT PROGRAM DEVELOPMENT.

DESCRIPTOR: *DEVELOPMENT; *IMPLEMENTATION; *MANUALS; *PROGRAM SUBMISSION; *NATIONAL PRETREATMENT PROGRAM; *OPERATIONS (WASTEWATER); PROGRAM DEVELOPMENT; *PRETREATMENT PROGRAMS; *PRETREATMENT; *REGULATIONS; *USEPA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 292P. PRICE: $18.52

ABSTRACT: THIS MANUAL PROVIDES GUIDANCE TO THE MUNICIPAL PERSONNEL RESPONSIBLE FOR THE DEVELOPMENT AND IMPLEMENTATION OF A LOCAL PRETREATMENT PROGRAM. IT ALSO PROVIDES RELEVANT INFORMATION TO THE OFFICIAL WHO WILL SUPERVISE THE LOCAL PROGRAM. THE MANUAL HAS TWO PURPOSES: (1) TO HELP PERSONNEL IN DEVELOPING PRETREATMENT PROGRAMS AND IMPLEMENTING PROGRAMS ON AN ONGOING BASIS, AND (2) TO ASSIST PERSONNEL IN PREPARING PROGRAMS FOR SUBMISSION TO OBTAIN APPROVAL. THE INTENT OF THE MANUAL IS TO PROVIDE SUFFICIENT GUIDANCE TO DEVELOP A LOCAL PRETREATMENT PROGRAM. HOWEVER, SOME QUESTIONS MAY REQUIRE ADDITIONAL ASSISTANCE BEYOND THIS MANUAL'S SCOPE. SPECIAL QUESTIONS OR PROBLEMS THAT ARE NOT COMPLETELY ADDRESSED HERE SHOULD BE REFERRED TO A STATE PRETREATMENT OFFICE OR THE APPROPRIATE EPA REGIONAL OFFICE. IN ADDITION, OTHER DOCUMENTS THAT MAY BE USEFUL WHEN DEVELOPING A PRETREATMENT PROGRAM ARE LISTED.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012561

PUBLICATION DATE: 83

TITLE: PROCEDURES MANUAL FOR REVIEWING A POTW PRETREATMENT PROGRAM SUBMISSION.

DESCRIPTOR: CHECKLISTS; ENFORCEMENT; *GUIDELINES; *MANUALS; *OPERATIONS (WASTEWATER); PERMITS; *PROGRAM APPROVAL; *PROGRAM SUBMISSION; *PRETREATMENT; *REGULATIONS; *USEPA; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 136P. PRICE: $7.16

ABSTRACT: THIS DOCUMENT HAS BEEN PREPARED TO ASSIST STATES AND EPA REGIONAL OFFICES IN REVIEWING LOCAL PRETREATMENT PROGRAM SUBMISSIONS. IT IS INTENDED TO PROVIDE A FRAMEWORK FOR THE REVIEW OF LOCAL PROGRAMS AS WELL AS GENERAL CRITERIA FOR EVALUATING THESE PROGRAMS. THE DOCUMENT CAN ALSO SERVE AS A STARTING POINT FOR STATES TO DEVELOP INDIVIDUALIZED CHECKLISTS FOR REVIEW OF LOCAL PROGRAMS UNDER THEIR JURISDICTION, IF SUCH CHECKLISTS HAVE NOT YET BEEN DEVELOPED. A SUCCESSFUL PRETREATMENT PROGRAM CANNOT BE DEVELOPED WITHOUT ADEQUATE LEGAL AUTHORITY, TECHNICAL INFORMATION, IMPLEMENTATION PROCEDURES, AND RESOURCES. EACH OF THESE ELEMENTS IS ESSENTIAL IN A SUCCESSFUL PROGRAM, AND THE PRETREATMENT PROGRAM SUBMISSION MUST DEMONSTRATE THAT ALL ARE PRESENT IF IT IS TO BE APPROVED. A SEPARATE CHAPTER IN THIS MANUAL IS DEVOTED TO EACH ELEMENT. EACH CHAPTER CONTAINS: (1) A SUMMARY OF PERTINENT REGULATORY REQUIREMENTS; (2) A DISCUSSION OF KEY ITEMS THAT SHOULD BE INCLUDED IN THE SUBMISSION; (3) GENERAL GUIDELINES AND CRITERIA FOR ASSESSING THE ADEQUACY OF THE APPROACHES PROPOSED BY THE POTW; AND (4) A CHECKLIST TO AID THE REVIEWER IN EVALUATING COMPLETENESS AND ADEQUACY. THE FOCUS OF THE REVIEW IS TO DETERMINE THAT THE PROGRAM NOT ONLY MEETS REGULATORY REQUIREMENTS, BUT ALSO THAT IT WILL FUNCTION WELL ONCE IT IS IMPLEMENTED. A MAJORITY OF THE REGULATORY REQUIREMENTS ASSOCIATED WITH A LOCAL PRETREATMENT PROGRAM ARE ADDRESSED IN THE LEGAL AUTHORITY CHAPTER. OTHER CHAPTERS IDENTIFY ACTIVITIES, STAFF ROLES, AND PROGRAM ITEMS THAT ARE MOST LIKELY TO BE INCLUDED IN A WELL-PLANNED PROGRAM.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012562

PUBLICATION DATE: 85

TITLE: DESIGN AND MANAGEMENT OF SUBSURFACE SOIL ABSORPTION SYSTEMS.

DESCRIPTOR: *CONSTRUCTION; *DESIGN; *HYDRAULICS; *MANAGEMENT; *OPERATIONS (WASTEWATER); *RESEARCH REPORTS; *SOILS; *SOIL ABSORPTION SYSTEMS; *SOIL INFILTRATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 160P. PRICE: $10.60

ABSTRACT: THIS REPORT PRESENTS THE RESULTS OF CONTINUING RESEARCH REGARDING ONSITE WASTEWATER DISPOSAL BY THE SMALL SCALE WASTE MANAGEMENT PROJECT (SSWMP) AT THE UNIVERSITY OF WISCONSIN-MADISON. REPORTING HERE ARE THE RESULTS OF TWO SEPARATE INVESTIGATIONS: (1) A STUDY OF THE EFFECTS OF SOIL ABSORPTION SYSTEM CONSTRUCTION PRACTICES UPON SOIL HYDRAULIC PROPERTIES; AND (2) A FIELD EXAMINATION OF THE EFFECTS OF VARIOUS OPERATIONAL STRATEGIES FOR SOIL ABSORPTION SYSTEMS UPON SOIL INFILTRATION PROPERTIES.

AVAILABILITY: ENVIRONMENTAL QUALITY INSTRUCTIONAL RESOURCES CENTER, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012563

PUBLICATION DATE: 85

TITLE: A DISC SYSTEM WITH DRAW (DIRECT READ AFTER WRITE).

PERSONAL AUTHOR: SPANGLER, LARRY S.

DESCRIPTOR: *AUDIOVISUAL AIDS; *DRAW; *INSTRUCTIONAL MATERIALS; *CURRICULUM DEVELOPMENT; *TRAINING; *VIDEODISCS

DESCRIPTIVE NOTE: 33-35P.

ABSTRACT: DESCRIBED IS THE DRAW (DIRECT READ AFTER WRITE) TECHNOLOGY WHICH MAKES IT POSSIBLE TO RECORD A LASERDISC ECONOMICALLY, AND HAS EXTENDED THE USE OF THE VIDEODISC BY MAKING IT A VIDEO PRODUCTION TOOL AS WELL AS A MEDIUM FOR TRAINING, EDUCATION, MARKETING, OR ENTERTAINMENT.

AVAILABILITY: EITV; V17 N8

IRIS ACCESSION NUMBER: EW012568

PUBLICATION DATE: 85

TITLE: DOCUMENTING WATER ENVIRONMENTS.

PERSONAL AUTHOR: ADAMS, TOM

DESCRIPTOR: *DOCUMENTATION; *ENVIRONMENT; *ENVIRONMENTAL IMPACT; *ENVIRONMENTAL CHANGE; *PHOTOGRAPHY; *WATER RESOURCES

DESCRIPTIVE NOTE: 24-29P.

ABSTRACT: REPEAT PHOTOGRAPHY IS A GOOD WAY TO DOCUMENT CHANGES IN THE ENVIRONMENT. THIS ARTICLE PRESENTS ONE APPROACH.

AVAILABILITY: TECHNICAL PHOTOGRAPHY; V17 N9

IRIS ACCESSION NUMBER: EW012569

PUBLICATION DATE: 85

TITLE: WHEN IS REUSE FEASIBLE?

PERSONAL AUTHOR: SCHORR, PAUL L.

DESCRIPTOR: *DECISION MAKING; *ECONOMICS; *MANAGEMENT; *INDUSTRIAL REUSE; *RECLAIMED WATER; *RECYCLING; *RISK ASSESSMENT; *WATER REUSE; *WATER RESOURCES; *WATER SUPPLY; *WATER QUALITY; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 10-12P.

ABSTRACT: THIS ARTICLE PRESENTS A SIMPLE TECHNIQUE FOR SCREENING AREAS FOR WATER REUSE OPPORTUNITIES, A BRIEF ECONOMIC ANALYSIS OF A REUSE PROJECT, AND A LIST OF INSTITUTIONAL AND MANAGEMENT OPPORTUNITIES.

AVAILABILITY: WATERWORLD NEWS; V1 N5

IRIS ACCESSION NUMBER: EW012570

PUBLICATION DATE: 85

TITLE: RECLAIMING ULTRAPURE RINSE WATERS.

PERSONAL AUTHOR: CARTWRIGHT, PETER S.

DESCRIPTOR: ACTIVATED CARBON; COSTS; DEIONIZATION; *ECONOMICS; FILTRATION; *INDUSTRIAL WASTES; *INDUSTRIAL REUSE; *OPERATIONS (WASTEWATER); *RECLAIMED WATER; REGULATIONS; *WASTEWATER TREATMENT; WATER SUPPLY; *WATER QUALITY; *WATER REUSE; *ULTRAPURE WATER

DESCRIPTIVE NOTE: 14-15P.

ABSTRACT: DESCRIBED IS A SYSTEM FOR PROCESSING WASTEWATER FROM AN ELECTRONICS COMPANY. AS THE COST OF RAW WATER AND WASTE DISCHARGE INCREASES, THE CONCEPT OF RECLAMATION AND MINIMAL DISCHARGE IS LIKELY TO BECOME WIDESPREAD IN THIS AND OTHER INDUSTRIES.

AVAILABILITY: WATERWORLD NEWS; V1 N5

IRIS ACCESSION NUMBER: EW012571

PUBLICATION DATE: 85

TITLE: COMBINING ULTRAFILTRATION/CARBON ADSORPTION TO TREAT INDUSTRIAL LAUNDARY WASTEWATER.

PERSONAL AUTHOR: VAN GILS, GERALD J.; AND OTHERS

DESCRIPTOR: *CARBON ADSORPTION; *COSTS; *LAUNDRIES; *INDUSTRIAL WASTES; *INDUSTRIAL REUSE; *OPERATIONS (WASTEWATER); *RECYCLING; *RECLAIMED WATER; *ULTRAFILTRATION; *WASTEWATER TREATMENT; WATER RESOURCES; WATER SUPPLY; WATER REUSE; *WATER QUALITY

DESCRIPTIVE NOTE: 16-17P.

ABSTRACT: AN EFFECTIVE SYSTEM FOR THE TREATMENT AND REUSE OF INDUSTRIAL LAUNDRY WASTEWATER WHICH INCORPORATES LIME COAGULATION AND SETTLING, HIGH-RATE ULTRAFILTRATION, AND FIXED-BED CARBON ADSORPTION, IS DESCRIBED IN THIS ARTICLE. THE OPERATING COST OF THE SYSTEM AND LIMITATIONS OF PREDICTIVE MODELING OF THE VARIABLE LAUNDRY WASTE MIXTURE ARE ALSO DISCUSSED.

AVAILABILITY: WATERWORLD NEWS; V1 N5

IRIS ACCESSION NUMBER: EW012572

PUBLICATION DATE: 85

TITLE: RECYCLE APPROACHES FOR PAPER AND PULP MILLS.

PERSONAL AUTHOR: WYVILL, J. CRAIG; AND OTHERS

DESCRIPTOR: *COSTS; INDUSTRY; *INDUSTRIAL WASTES;

*INDUSTRIAL REUSE; *PAPER MILLS; *RECYCLING; RECLAIMED WATER; *REGULATIONS; *WASTEWATER TREATMENT; WATER RESOURCES; WATER SUPPLY; *WATER QUALITY; *WATER REUSE

DESCRIPTIVE NOTE: 18-20P.

ABSTRACT: THERE ARE SOME RECYCLE SCHEMES THAT DO HAVE BROAD TECHNICAL POTENTIAL AND GENERAL ECONOMIC ATTRACTIVENESS, YET FOR ONE REASON OR ANOTHER ARE NOT WIDELY EMPLOYED BY THE INDUSTRY. DESCRIBED ARE FOUR SUCH RECYCLE SCHEMES THAT COULD HAVE A SUBSTANTIAL IMPACT ON FUTURE WATER DEMAND IF THEY WERE BROADLY USED.

AVAILABILITY: WATERWORLD NEWS; V1 N5

IRIS ACCESSION NUMBER: EW012573

PUBLICATION DATE: 85

TITLE: REUSE POTENTIAL OF COAL SLURRY WASTEWATER.

PERSONAL AUTHOR: MOORE, JAMES W.

DESCRIPTOR: *AGRICULTURE; *COAL SLURRY WASTEWATER; *ELECTRIC POWER PLANTS; INDUSTRY; INDUSTRIAL WASTES; *INDUSTRIAL REUSE; *RECYCLING; *RECLAIMED WATER; *UTILITIES; WATER RESOURCES; WATER SUPPLY; *WATER REUSE; *WATER QUALITY

DESCRIPTIVE NOTE: 21-22P.

ABSTRACT: DESCRIBED ARE POTENTIAL USES OF RECLAIMED WATER FROM COAL SLURRY PIPELINES.

AVAILABILITY: WATERWORLD NEWS; V1 N5

IRIS ACCESSION NUMBER: EW012574

PUBLICATION DATE: 85

TITLE: FILTER PRESS TRAPS GIARDIA CYSTS.

PERSONAL AUTHOR: HOLLINGSWORTH, JOHN E.; AND OTHERS

DESCRIPTOR: *DRINKING WATER; *FILTRATION; *GIARDIA; *OPERATIONS (WATER); *OREGON; *REGULATIONS; *RURAL AREAS; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 23P.

ABSTRACT: DESCRIBED IS A FILTER PRESS FOR FILTERING DRINKING WATER IN STATE PARKS TO REMOVE GIARDIA CYSTS.

AVAILABILITY: WATERWORLD NEWS; V1 N5

IRIS ACCESSION NUMBER: EW012575

PUBLICATION DATE: 85

TITLE: DISKS FOR THE LABORATORY, PART II.

DESCRIPTOR: *AUDIOVISUAL AIDS; *CHEMISTRY; *CHEMICAL ANALYSES; *COMPUTER STORAGE DEVICES; *COMPUTER APPLICATIONS; *MAGNETIC TAPES; *VIDEODISC RECORDINGS

DESCRIPTIVE NOTE: 805-810AP.

ABSTRACT: PART 1 PRESENTED THE CHEMISTRY, PHYSICS, AND ENGINEERING TECHNOLOGY ASSOCIATED WITH MAGNETIC AND OPTIMAL DISKS. THIS PART EXPLORES THE SUBJECTS OF ARCHIVING, SECURITY, VALIDATION AND CERTIFICATION, AND PROTECTION. QUESTIONS AND ISSUES ARE RAISED IN EACH OF THESE AREAS WHICH BOTH USERS AND VENDORS SHOULD BE AWARE.

AVAILABILITY: ANALYTICAL CHEMISTRY, V57 N7

IRIS ACCESSION NUMBER: EW012576

PUBLICATION DATE: 85

TITLE: SCIENTIFIC WORD PROCESSORS PROLIFERATE.

DESCRIPTOR: *CHEMISTRY; *COMPUTER SOFTWARE; *COMPUTER APPLICATIONS; *SCIENCES; *WORD PROCESSING

DESCRIPTIVE NOTE: 888A-892AP.

ABSTRACT: BRIEFLY DESCRIBED ARE MOST OF THE CURRENTLY AVAILABLE SCIENTIFIC WORD PROCESSING SOFTWARE PACKAGES. UNLESS NOTED, THESE PRODUCTS (INCLUDING MOLECULAR PRESENTATION GRAPHICS, PROOFWRITER, SPELLBINDER SCIENTIFIC, VOLKSWRITER SCIENTIFIC, AND WORDMARC) RUN ON THE IBM PC FAMILY OF MICROCOMPUTERS.

AVAILABILITY: ANALYTICAL CHEMISTRY, V57 N8

IRIS ACCESSION NUMBER: EW012577

PUBLICATION DATE: 85

TITLE: DRINKING WASTEWATER.

PERSONAL AUTHOR: NYDES, BURT

DESCRIPTOR: *DRINKING WATER; *EFFLUENT; *RECYCLING; *WASTEWATER TREATMENT; *WATER CONSERVATION; *WATER SUPPLY; *WATER RESOURCES; *WATER USE; *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 52-60P.

ABSTRACT: IN THE FUTURE, DRINKING PROCESSED WASTEWATER MAY BE COMMON, BUT FOR NOW, THE REUSE OF TREATED EFFLUENT IS GENERALLY LIMITED TO OTHER APPLICATIONS. SEVERAL PROJECTS FOR RECYCLING WASTEWATER ARE DESCRIBED. VARIOUS APPLICATIONS

ARE INCLUDED.

AVAILABILITY: AMERICAN CITY AND COUNTY; V100 N9

IRIS ACCESSION NUMBER: EW012578

PUBLICATION DATE: 85

TITLE: GROUNDWATER PROTECTION STARTS BELOW THE SURFACE.

PERSONAL AUTHOR: SNOW, AUSTIN

DESCRIPTOR: *DRINKING WATER; *CONTAMINATION; *GROUNDWATER; *STORAGE TANKS; *UNDERGROUND TANKS; *WATER RESOURCES; *WATER SUPPLY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 62-70P.

ABSTRACT: OF ALL THE SOURCES OF CONTAMINATION, LEAKING UNDERGROUND STORAGE TANKS MAY POSE THE MOST SERIOUS THREAT TO HUMAN HEALTH.

AVAILABILITY: AMERICAN CITY AND COUNTY; V100 N9

IRIS ACCESSION NUMBER: EW012579

PUBLICATION DATE: 85

TITLE: PRIVATIZATION: IS IT THE ANSWER?
PERSONAL AUTHOR: SULLIVAN, RICHARD A.

DESCRIPTOR: *ECONOMICS; *FINANCING; *FACILITIES; *CONTRACT SERVICES; *OPERATIONS (WASTEWATER); *PRIVATIZATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 20-23P.

ABSTRACT: THIS ARTICLE CONSIDERS PRIVATIZATION AS ONE APPROACH TO SOLVE THE NEEDS FOR WASTEWATER TREATMENT FACILITIES AND OPERATIONS. ADVANTAGES AND DISADVANTAGES ARE PRESENTED.

AVAILABILITY: POLLUTION ENGINEERING; V17 N7

IRIS ACCESSION NUMBER: EW012580

PUBLICATION DATE: 85

TITLE: OPERATION FISHBOWL.

PERSONAL AUTHOR: WHITE, JAMES E.

DESCRIPTOR: *COMPLIANCE; *BIOMONITORING; *CONTRACT SERVICES; *INDUSTRIAL WASTES; *MISSOURI; *MONITORING; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 24-25P.

ABSTRACT: DESCRIBED IS A BIOMONITORING POND USED IN INDEPENDENCE, MO. THE CITY CONTRACTS WITH INDUSTRY TO TREAT THEIR INDUSTRIAL WASTES AND USES THE BIOMONITORING POND AS EVIDENCE THAT EFFLUENT FROM THE PLANT COMPLIES WITH REGULATIONS.

AVAILABILITY: POLLUTION ENGINEERING; V17 N7

IRIS ACCESSION NUMBER: EW012581

PUBLICATION DATE: 85

TITLE: THE INNOVATIVE TECHNOLOGY OF SEQUENCING BATCH REACTORS.

PERSONAL AUTHOR: MANDT, MICHAEL G.

DESCRIPTOR: *ACTIVATED SLUDGE; *BATCH REACTORS; *FACILITIES; *EQUIPMENT; *OPERATIONS (WASTEWATER); *PROCESS CONTROL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 26-28P.

ABSTRACT: DESCRIBED IS THE SEQUENCING OF BATCH REACTORS USED IN THE ACTIVATED SLUDGE PROCESS.

AVAILABILITY: POLLUTION ENGINEERING; V17 N7

IRIS ACCESSION NUMBER: EW012582
PUBLICATION DATE: 85

TITLE: SPECIAL REPORT: VOLATILE ORGANIC COMPOUNDS.

PERSONAL AUTHOR: CHEREMISINOFF, PAUL N.

DESCRIPTOR: *AIR POLLUTION CONTROL; *CARBON ADSORPTION; *INDUSTRIAL WASTES; *SOLVENTS; *SOLVENT RECOVERY

DESCRIPTIVE NOTE: 29-38P.

ABSTRACT: DESCRIBED ARE PRODEDURES FOR REMOVING SOLVENTS FROM AIR EMISSIONS. COMPANIES PROVIDING EQUIPMENT AND SUPPLIES FOR SOLVENT RECOVERY SYSTEMS ARE LISTED.

AVAILABILITY: POLLUTION ENGINEERING; V17 N3

IRIS ACCESSION NUMBER: EW012583

PUBLICATION DATE: 85

TITLE: ION CHROMATOGRAPH PROVIDES RAPID ANALYSIS OF AIR AND WATER.

PERSONAL AUTHOR: PECEVICH, PHIL

DESCRIPTOR: *AIR POLLUTION; *ANALYTICAL TECHNIQUES; *CHROMATOGRAPHY; *ION CHROMATOGRAPHY; *LABORATORY

PROCEDURES; *WATER POLLUTION
DESCRIPTIVE NOTE: 53-55P.

ABSTRACT: DESCRIBED ARE THE PRINCIPLES OF ION CHROMATOGRAPHY.

AVAILABILITY: POLLUTION ENGINEERING; V17 N3

IRIS ACCESSION NUMBER: EW012584

PUBLICATION DATE: 85

TITLE: ERT'S HASTE.

DESCRIPTOR: *CHEMICAL SPILLS; *CHEMICALS; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *HASTE; *HAZARD ASSESSMENT SYSTEM FOR TOXIC EMISSIONS; *EMERGENCY RESPONSE; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 60-62P.

ABSTRACT: DESCRIBED IS THE HAZARD ASSESSMENT SYSTEM FOR TOXIC EMISSIONS (HASTE). HASTE IS A COMPUTER-BASED EMERGENCY RESPONSE SYSTEM USED TO ANALYZE THE RISKS POSED BY THE RELEASE OF TOXIC CHEMICALS.

AVAILABILITY: POLLUTION ENGINEERING; V17 N8

IRIS ACCESSION NUMBER: EW012585

PUBLICATION DATE: 85

TITLE: EMERGENCY RESPONSE AND SPILL CONTROL.

DESCRIPTOR: *AIR POLLUTION CONTROL; *CHEMICALS; *CLEANUP; *EMERGENCY RESPONSE; *HAZARDOUS MATERIALS; *INFORMATION SYSTEMS; *LAND POLLUTION CONTROL; *PLANNING; *SPILL CONTROL; *TOXIC SUBSTANCES; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 39-43P.

ABSTRACT: DISCUSSED ARE EMERGENCY RESPONSE AND SPILL CONTROL OF CHEMICALS.

AVAILABILITY: POLLUTION ENGINEERING; V17 N8

IRIS ACCESSION NUMBER: EW012586

PUBLICATION DATE: 85

TITLE: DANBURY CONTROLS HAZARDOUS MATERIALS AT THEIR SOURCE.

PERSONAL AUTHOR: KOZUCHOWSKI, JACK S.

DESCRIPTOR: CONNECTICUT; CHEMICALS; EMERGENCY RESPONSE; *HAZARDOUS MATERIALS; LEGISLATION; PLANNING; *REGULATIONS; *REGULATORY PROGRAMS; SAFETY
DESCRIPTIVE NOTE: 47-48P.

ABSTRACT: DESCRIBED IS ONE CITIES REGULATORY PROGRAM AIMED AT CONTROLLING HAZARDOUS MATERIALS AT LOCATIONS IN THE CITY WHERE THEY ARE STORED, MIXED, USED, AND PRODUCED.

AVAILABILITY: POLLUTION ENGINNERING; V17 N8

IRIS ACCESSION NUMBER: EW012587

PUBLICATION DATE: 85

TITLE: TOXIC MATERIALS RISK ASSESSMENT: A PRACTICAL GUIDE.

PERSONAL AUTHOR: CAMOUGIS, GEORGE

DESCRIPTOR: *CONTAMINANTS; *ENVIRONMENT; *HAZARD DETERMINATION; *HAZARDOUS MATERIALS; *LEGISLATION; *PUBLIC HEALTH; *REGULATIONS; *RISK ASSESSMENT; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 50-57P.

ABSTRACT: THIS ARTICLE PROVIDES A PRACTICAL GUIDE TO TOXIC MATERIALS RISK ASSESSMENT. INCLUDED ARE A LISTING OF KEY FEDERAL LAWS, SOURCES OF TOXIC CONTAMINANTS IN THE ENVIRONMENT, AND A SUMMARY OF EXAMPLES OF EXPOSURES AND ROUTES OF ENTRY OF TOXIC MATERIALS.

AVAILABILITY: POLLUTION ENGINEERING; V17 N8

IRIS ACCESSION NUMBER: EW012588

PUBLICATION DATE: 85

TITLE: CERTIFICATION OF HAZARDOUS MATERIALS MANAGERS: QUALITY CONTROL OF PROFESSIONAL PERSONNEL.

PERSONAL AUTHOR: MCCAMBRIDGE, JOHN J.

DESCRIPTOR: *CERTIFICATION; *HAZARDOUS MATERIALS; *MANAGEMENT; *PERSONNEL; *TRAINING; *TRAINING PROGRAMS

DESCRIPTIVE NOTE: 28-29P.

ABSTRACT: DISCUSSED IS THE NEED FOR CERTIFICATION OF HAZARDOUS MATERIALS MANAGERS AND THE CERTIFIED HAZARDOUS MATERIALS MANAGER PROGRAM DEVELOPED BY THE INSTITUTE OF HAZARDOUS MATERIALS MANAGEMENT.

AVAILABILITY: POLLUTION ENGINEERING, V17 N5

IRIS ACCESSION NUMBER: EW012589

PUBLICATION DATE: 85

TITLE: WASTEWATER TREATMENT IN THE KANSAS CITY METROPOLITAN

AREA.
PERSONAL AUTHOR: WELLER, LLOYD W.; AND OTHERS

DESCRIPTOR: *EQUIPMENT; *FACILITIES; KANSAS; MISSOURI; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PROGRAM DESCRIPTIONS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 902-11P.

ABSTRACT: DESCRIBED ARE WASTEWATER TREATMENT OPERATIONS IN THE KANSAS CITY METROPOLITAN AREA.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION, V57 N9

IRIS ACCESSION NUMBER: EW012590

PUBLICATION DATE: 85

TITLE: ACTIVATED SLUDGE REACTOR/FINAL CLARIFIER LINKAGES: SUCCESS DEMANDS FUNDAMENTAL UNDERSTANDING.

PERSONAL AUTHOR: MULBARGER, MICHAEL C.; AND OTHERS

DESCRIPTOR: *ACTIVATED SLUDGE; CLARIFIERS; *MANAGEMENT; *OPERATIONS (WASTEWATER); *PROCESS CONTROLS; *PERFORMANCE EVALUATION; *SLUDGE BULKING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 921-20P.

ABSTRACT: SYSTEM PERFORMANCE WAS IMPROVED BY AN OPERATING STRATEGY THAT INCORPORATED CONTROLLED SLUDGE BULKING AND A CONSTANT SLUDGE RETURN RATE.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N9

IRIS ACCESSION NUMBER: EW012591

PUBLICATION DATE: 85

TITLE: RELIABLE OZONE DISINFECTION USING OFF-GAS CONTROL.

PERSONAL AUTHOR: VENOSA, ALBERT D.; AND OTHERS

DESCRIPTOR: *DISINFECTION; *COSTS; *MANAGEMENT; *OZONE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *PROCESS CONTROLS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 929-34P.

ABSTRACT: OFF-GAS CONCENTRATION AND CONTACT TIME CAN BE EMPIRICALLY CORRELATED WITH COLIFORM DENSITY AND THUS BE USED AS THE BASIS FOR A PROCESS CONTROL STRATEGY.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N9

IRIS ACCESSION NUMBER: EW012592
PUBLICATION DATE: 85

TITLE: LAKE MANAGEMENT.

PERSONAL AUTHOR: MEDINE, ALLEN J.; LAMARRA, VINCENT A.

DESCRIPTOR: *ACID PRECIPITATION; *BIBLIOGRAPHIES; *LAKES; *LITERATURE REVIEWS; *MANAGEMENT; *MODELS; *NUTRIENTS; *RESEARCH; *WATER QUALITY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 965-72P.

ABSTRACT: THIS LITERATURE REVIEW IS CONCERNED WITH THE FATE AND EFFECTS OF POLLUTANTS IN LAKES AND LAKE MANAGEMENT. SECTIONS ARE INCLUDED ON NUTRIENTS, ECOSYSTEM MODELING, LABORATORY STUDIES, LAKE MANAGEMENT, AND ACID PRECIPITATION. AN EXTENSIVE BIBLIOGRAPHY IS INCLUDED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N9

IRIS ACCESSION NUMBER: EW012593

PUBLICATION DATE: 85

TITLE: COMPETING USES FOR LIMITED WATER.

PERSONAL AUTHOR: CAMPBELL, GREGG A.

DESCRIPTOR: *COLORADO; COSTS; ECONOMICS; LEGISLATION; *NATURAL RESOURCES; NEEDS ASSESSMENT; REGULATIONS; *WATER DEMAND; *WATER RESOURCES; *WATER SUPPLY; *WATER QUALITY

DESCRIPTIVE NOTE: 34-39P.

ABSTRACT: DEVELOPING WATER RESOURCES IN COLORADO REQUIRES CAREFUL BALANCING OF LAW, INTERSTATE COMPACTS, AND ECONOMIC BENEFITS. DESCRIBED ARE SOME OF THESE PROBLEMS.

AVAILABILITY: AWWA JOURNAL, V77 N9

IRIS ACCESSION NUMBER: EW012594

PUBLICATION DATE: 85

TITLE: WATER RIGHTS IN AN AGE OF ANXIETY.

PERSONAL AUTHOR: CHANG, WILLIAMSON B. C.

DESCRIPTOR: *HAWAII; *LEGISLATION; *PLANNING; *POLICIES; *RIPARIAN RIGHTS; *WATER RIGHTS; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 40-43P.

ABSTRACT: RIPARIAN RIGHTS IN HAWAII ARE UNDERGOING GRADUAL CHANGE AS COURTS DEAL WITH CONTEMPORARY REALITIES. THE ARTICLE SHOWS HOW THE LAW GROWS AND CHANGES AS SOCIETY

CHANGES.
AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW012595

PUBLICATION DATE: 85

TITLE: WATER RESOURCE PLANNING FOR MAXIMUM BENEFIT.

PERSONAL AUTHOR: MILLER, WILLIAM H.

DESCRIPTOR: LEGISLATION; LITIGATION; *MANAGEMENT; MULTIPLE USE; *NATURAL RESOURCES; PLANNING; POLICIES; *PUBLIC WATER SUPPLIES; *SURFACE WATERS; *WATER QUALITY; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 44-47P.

ABSTRACT: WATER UTILITIES MUST PARTICIPATE IN OVERALL WATER RESOURCE PLANNING DECISIONS OR FACE UNPOTABLE PUBLIC USES OF SURFACE SUPPLIES. SOME OF THE PROBLEMS ARE CONSIDERED.

AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW012596

PUBLICATION DATE: 85

TITLE: MEETING STREAMFLOW REQUIREMENTS.

PERSONAL AUTHOR: TRELEASE, FRANK J.

DESCRIPTOR: *FLOW PROTECTION; *LEGISLATION; *MANAGEMENT; *PLANNING; *POLICIES; *STREAM PROTECTION; *STREAMFLOW REQUIREMENTS; *WATER RIGHTS; *WATER USE; *WATER SUPPLY; *WATER RESOURCES; *WATER QUALITY

DESCRIPTIVE NOTE: 48-52P.

ABSTRACT: SEVERAL METHODS OF MEETING IN-STREAM FLOW REQUIREMENTS CAN BE DEVISED WITHOUT DETRIMENT TO MUNICIPAL SUPPLIES. SOME OF THESE METHODS ARE DESCRIBED.

AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW012597

PUBLICATION DATE: 85

TITLE: WATER: ALLOCATING A SCARCE RESOURCE.

PERSONAL AUTHOR: CAMPBELL, THOMAS C.

DESCRIPTOR: *LEGISLATION; *MANAGEMENT; *NATURAL RESOURCES; *PLANNING; *POLICIES; *RIPARIAN DOCTRINE; *WATER RIGHTS; *WATER RESOURCES; *WATER SUPPLY

DESCRIPTIVE NOTE: 53-56P.
ABSTRACT: THE AUTHOR ADDRESSES SHORTCOMINGS OF THE RIPARIAN DOCTRINE OF WATER RIGHTS AS WELL AS THE PRIOR APPROPRIATION DOCTRINE IN VIEW OF THE INCREASING PRESSURE ON WATER SUPPLIES. TO SOLVE THE PROBLEM OF SHORTAGES THAT WILL INEVITABLY OCCUR, MARKET PRICING, IN LIEU OF COSTLY WATER DEVELOPMENT PROJECTS, IS ADVOCATED AS A MEANS OF ALLOCATING WATER SUPPLIES FOR PRIORITY USES.

AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW012598

PUBLICATION DATE: 85

TITLE: 226RA AND 228RA IN WATER SUPPLIES.

PERSONAL AUTHOR: LUCAS, HENRY F.

DESCRIPTOR: *GROUNDWATER; *RADIATION; *RADIUM; *SURVEYS; *WATER QUALITY; *WATER SUPPLY

DESCRIPTIVE NOTE: 57-67P.

ABSTRACT: THIS SURVEY DETAILS THE RADIUM CONCENTRATIONS FOUND IN GROUNDWATER SUPPLIES IN FIVE STATES.

AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW012599

PUBLICATION DATE: 85

TITLE: MODERN TECHNIQUES IN WELL DESIGN.

PERSONAL AUTHOR: WILLIAMS, DENNIS E.

DESCRIPTOR: *DESIGN; *GROUNDWATER; *WATER SUPPLY; *WELLS

DESCRIPTIVE NOTE: 68-74P.

ABSTRACT: A NEW METHOD OF DESIGNING EFFICIENT WELLS AND DETERMINING THE EFFICIENCY OF AN EXISTING WELL IS PRESENTED.

AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW012600

PUBLICATION DATE: 85

TITLE: COMMITTEE REPORT: CURRENT PRACTICE IN BACTERIOLOGICAL SAMPLING.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *BACTERIA; *CONTAMINATION; *DISINFECTION; *MICROBIOLOGY; *MONITORING; *SAMPLING; *SURVEYS; *WATER DISTRIBUTION SYSTEMS; *WATER SUPPLY; *WATER QUALITY

DESCRIPTIVE NOTE: 75-81P.

ABSTRACT: AN EFFECTIVE SAMPLING PROGRAM CAN MEASURE THE RELIABILITY OF PROTECTION OF THE ENTIRE DISTRIBUTION SYSTEM AGAINST MICROBIOLOGICAL CONTAMINATION. A RECENT SURVEY INDICATES THERE IS GREAT VARIABILITY AMONG SAMPLING PROGRAMS FOR MICROBIOLOGICAL CONTAMINATION.

AVAILABILITY: AWWA JOURNAL; V77 N9

IRIS ACCESSION NUMBER: EW012601

PUBLICATION DATE: 85

TITLE: MANAGEMENT AUDITS: A TOOL FOR WATER UTILITIES.

PERSONAL AUTHOR: CONLEY, JOHN P.

DESCRIPTOR: *AUDITS; *MANAGEMENT AUDITS; *WATER RATES; *WATER UTILITIES

DESCRIPTIVE NOTE: 34-37P.

ABSTRACT: GREATER EFFICIENCY AND HIGHER MORALE CAN RESULT FROM OBJECTIVE EVALUATIONS OF MANAGEMENT PRACTICES. THIS ARTICLE EXPLAINS WHAT A MANAGEMENT AUDIT IS AND WHAT BENEFITS IT CAN PROVIDE.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW012602

PUBLICATION DATE: 85

TITLE: CORPS OF ENGINEERS DEVELOPS WATER SUPPLY TOOLS.

PERSONAL AUTHOR: WALSKI, THOMAS M.

DESCRIPTOR: *CORPS OF ENGINEERS; DESIGN; COST ESTIMATING; CORROSION CONTROL; *INFORMATION SOURCES; MAINTENANCE; PIPE SELECTION; REFERENCES; *WATER CONSERVATION; *WATER SUPPLY; *WATER DISTRIBUTION

DESCRIPTIVE NOTE: 38-40P.

ABSTRACT: MANY DOCUMENTS THAT COULD AID ENGINEERS AND PLANNERS OF WATER SYSTEMS ARE AVAILABLE FROM THE CORPS OF ENGINEERS. A LIST OF REPORTS AND MANUALS APPLICABLE TO THE DRINKING WATER INDUSTRY IS INCLUDED.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW012603

PUBLICATION DATE: 85

TITLE: CONTROLLING ALGAE IN WATER SUPPLY IMPOUNDMENTS.

PERSONAL AUTHOR: RAMAN, RAMAN K.

DESCRIPTOR: *ALGAE; *BIOLOGICAL CONTROL; *CHEMICAL CONTROL; *PHYSICAL CONTROL; *WATER SUPPLY; *WATER QUALITY

DESCRIPTIVE NOTE: 41-43P.

ABSTRACT: A SLOW-RELEASE, SINGLE-POINT METHOD OF APPLYING ALGICIDES, ALONG WITH LAKE DESTRATIFICATION, IS REPORTED TO BE EFFECTIVE AND ECONOMICAL FOR CONTROLLING BLUE-GREEN ALGAE.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW012604

PUBLICATION DATE: 85

TITLE: A TREATMENT PLANT OPERATOR ASSESSES OZONATION.

PERSONAL AUTHOR: LEPAGE, WILFRED L.

DESCRIPTOR: *MICHIGAN; *OPERATIONS (WATER); *ODORS; *OZONE; *OZONATION; *TASTE; *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 44-48P.

ABSTRACT: OZONE USED AS AN OXIDANT HAS PROVED TO BE THE MOST EFFECTIVE METHOD FOUND TO CONTROL TASTE AND ODORS IN A LAKE ERIE WATER SUPPLY.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW012605

PUBLICATION DATE: 85

TITLE: PREPURCHASING OZONE EQUIPMENT.

PERSONAL AUTHOR: MONK, ROBERT D. G.; AND OTHERS

DESCRIPTOR: *CONTRACTS; *EQUIPMENT; *OZONATION; *PURCHASING; *SPECIFICATIONS; *WATER TREATMENT

DESCRIPTIVE NOTE: 49-54P.

ABSTRACT: TRADITIONAL BIDDING PROCEDURES WERE DISCARDED IN FAVOR OF AN UNUSUAL APPROACH FOR THE PURCHASE OF OZONATION EQUIPMENT TO BE INSTALLED AT THE LOS ANGELES AQUEDUCT FILBRATION PLANT.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW012606

PUBLICATION DATE: 85

TITLE: FACTORS CONTROLLING THE REMOVAL OF ORGANIC

POLLUTANTS IN OZONE REACTORS.
PERSONAL AUTHOR: GUROL, MIRAT D.

DESCRIPTOR: *MODELS; *ORGANIC POLLUTANTS; *OZONE REACTORS; *WASTEWATER TREATMENT; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 55-60P.

ABSTRACT: IT WILL SOON BE POSSIBLE TO USE A MODEL TO EVALUATE VARIOUS OPERATIONAL ALTERNATIVES FOR OPTIMUM PERFORMANCE OF OZONE REACTORS FOR REMOVING ORGANIC POLLUTANTS. THE MODEL DEVELOPED IS DESCRIBED.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW012607

PUBLICATION DATE: 85

TITLE: USING OZONE AND ULTRASOUND TO REDUCE RO MEMBRANE FOULING.

PERSONAL AUTHOR: LOZIER, JAMES C.; SIERKA, RAYMOND A.

DESCRIPTOR: *HUMIC AIDS; *MAINTENANCE; *MEMBRANE FOULING; OPERATIONS (WATER); OZONE; *OZONATION; *REVERSE OSMOSIS; *PERFORMANCE EVALUATION; ULTRASOUND; *WATER TREATMENT

DESCRIPTIVE NOTE: 60-65P.

ABSTRACT: OZONATION WITHOUT ULTRASOUND WAS FOUND TO BE THE MOST EFFECTIVE METHOD STUDIED FOR REDUCING THE MEMBRANE FOULING POTENTIAL OF HUMIC ACIDS.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW012608

PUBLICATION DATE: 85

TITLE: OZONE--GAC FOLLOWING CONVENTIONAL US DRINKING WATER TREATMENT.

PERSONAL AUTHOR: MALONEY, STEPHEN W.; AND OTHERS

DESCRIPTOR: *ACTIVATED CARBON; *GRANULAR ACTIVATED CARBON; *OPERATIONS (WATER); *OZONE; *ORGANIC COMPOUNDS; *PERFORMANCE EVALUATION; *WATER QUALITY; *WATER TREATMENT

DESCRIPTIVE NOTE: 66-73P.

ABSTRACT: STUDIES SHOWED THAT CONVENTIONAL TREATMENT WITHOUT PRECHLORINATION FOLLOWED BY OZONE-GAC, WAS THE MOST EFFECTIVE PROCESS FOR REMOVING DISSOLVED ORGANIC CARBON FROM A DELAWARE RIVER SOURCE WATER.

AVAILABILITY: AWWA JOURNAL; V77 N8

83

IRIS ACCESSION NUMBER: EW012609
PUBLICATION DATE: 85

TITLE: EFFECTS OF OZONE AND STORAGE TEMPERATURE ON GIARDIA CYSTS.

PERSONAL AUTHOR: WICKRAMANAYAKE, G. B.; AND OTHERS

DESCRIPTOR: *GIARDIA; *OPERATIONS (WATER); *OZONE; *PERFORMANCE EVALUATION; *RESEARCH; *TEMPERATURE; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 74-77P.

ABSTRACT: EXPERIMENTAL RESULTS INDICATE THAT GIARDIA MURIS COULD BE USED AS A MODEL IN STUDIES INVESTIGATING INACTIVATION OF GIARDIA LAMBLIA THROUGH OZONE AND CHLORINE DISINFECTION.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW012610

PUBLICATION DATE: 85

TITLE: REMOVING FULVIC ACID BY LINE SOFTENING.

PERSONAL AUTHOR: LIAO, MARCIA YUNMEN; RANDTKE, STEPHEN J.

DESCRIPTOR: *FULVIC ACID; *GROUNDWATER; *LIME SOFTENING; *OPERATIONS (WATER); *PERFORMANCE EVALUATION; *RESEARCH; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 78-88P.

ABSTRACT: STUDIES INDICATE THAT LIME SOFTENING IS EFFECTIVE IN REMOVING A SIGNIFICANT FRACTION OF A FULVIC ACID EXTRACTED FROM GROUNDWATER.

AVAILABILITY: AWWA JOURNAL; V77 N8

IRIS ACCESSION NUMBER: EW012611

PUBLICATION DATE: 85

TITLE: PROBLEMS WITH RAPID INFILTRATION-- A POST MORTEM ANALYSIS.

PERSONAL AUTHOR: REED, S. C.; AND OTHERS

DESCRIPTOR: *COSTS; *CASE STUDIES; *DESIGN; *FACILITIES; *MANAGEMENT; *PERFORMANCE EVALUATION; *RAPID INFILTRATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 854-58P.

ABSTRACT: MOST OPERATIONAL PROBLEMS WITH RAPID INFILTRATION SYSTEMS STEM FROM INADEQUATE FIELD INVESTIGATIONS AND INTERPRETATION OF DATA AT THE DESIGN STAGE. THIS ARTICLE

84

PRESENTS CASE STUDIES OF SEVERAL SYSTEMS.
AVAILABILITY: JOURNAL WPCF; V57 N8

IRIS ACCESSION NUMBER: EW012612

PUBLICATION DATE: 85

TITLE: THE RELATIONSHIP BETWEEN SVI AND ACTIVATED SLUDGE SETTLING CHARACTERISTICS.

PERSONAL AUTHOR: DAIGGER, G. T.; ROPER, R. E.

DESCRIPTOR: *ACTIVATED SLUDGE CLARIFIERS; *DESIGN; *FACILITIES; *MANAGEMENT; *PILOT PLANTS; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *SLUDGE; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 859-66P.

ABSTRACT: CORRELATING SETTLING TEST DATA WITH THE SLUDGE VOLUME INDEX ALLOWS SETTLING FLUX THEORY TO BE EASILY APPLIED TO PLANT DESIGN AND OPERATION. DESCRIBED ARE EXPERIENCES WITH A PILOT PLANT.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N8

IRIS ACCESSION NUMBER: EW012613

PUBLICATION DATE: 85

TITLE: TECHNOLOGY EVALUATION OF SEQUENCING BATCH REACTORS.

PERSONAL AUTHOR: ARORA, MADAN L.; AND OTHERS

DESCRIPTOR: *BATCH REACTORS; *DESIGN; *FACILITIES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *SEQUENCING BATCH REACTORS; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 867-75P.

ABSTRACT: A LACK OF WIDELY ACCEPTED DESIGN STANDARDS IS THE MAJOR OBSTACLE TO BRINGING SEQUENCING BATCH REACTOR (SBR) TECHNOLOGY FROM THE RESEARCH STAGE TO BROADER PRACTICAL APPLICATION. THIS ARTICLE REPORTS ON THE PERFORMANCE EVALUATION OF SBR'S AT SEVERAL PLANTS IN THE U.S.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N8

IRIS ACCESSION NUMBER: EW012614

PUBLICATION DATE: 85

TITLE: MONITORING AERATED LAGOON PERFORMANCE.

PERSONAL AUTHOR: EISCHEN, GEORG W.; KEENAN, JOHN D.
DESCRIPTOR: *AERATED LAGOONS; FACILITIES; LAGOONS; *MONITORING; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; RESEARCH; SAMPLING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 876-81P.

ABSTRACT: STEPWISE INCREMENTAL MODELING IS MORE ACCURATE THAN TRADITIONAL MODELS AND CAN LEAD TO MORE EFFICIENT DESIGN AND OPERATION. RESULTS OF A STUDY ARE PRESENTED AND DISCUSSED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N8

IRIS ACCESSION NUMBER: EW012615

PUBLICATION DATE: 85

TITLE: CHEMISTRY, MICROBIOLOGY, AND MODELING OF CHLORINATION FOR ACTIVATED SLUDGE BULKING CONTROL.

PERSONAL AUTHOR: NEETHLING, J. B.; AND OTHERS

DESCRIPTOR: ACTIVATED SLUDGE; *ACTIVATED SLUDGE BULKING; CHEMISTRY; CHLORINATION; MICROBIOLOGY; *MODELS; *OPERATIONS (WASTEWATER); *PROCESS CONTROLS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 882-89P.

ABSTRACT: A LIMITING FREQUENCY OF EXPOSURE OF SOLIDS TO CHLORINE EXISTS, BELOW WHICH CHLORINATION WILL NOT PREVENT SLUDGE BULKING. A MODEL THAT PREDICTS A LIMITING FREQUENCY IS REPORTED.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION; V57 N8

IRIS ACCESSION NUMBER: EW012616

PUBLICATION DATE: 85

TITLE: USING ATP TO DETERMINE THE CHLORINE RESISTANCE OF FILAMENTOUS BACTERIA ASSOCIATED WITH ACTIVATED SLUDGE BULKING.

PERSONAL AUTHOR: NEETHLING, J. B.; AND OTHERS

DESCRIPTOR: *ACTIVATED SLUDGE; *ACTIVATED SLUDGE BULKING; *ADENOSINE TRIPHOSPHATE; *CHLORINATION; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 890-94P.

ABSTRACT: DIFFERENCES BETWEEN PLATE COUNTING AND ATP MEASUREMENT MAY EXPLAIN THE REGROWTH PHENOMENON ASSOCIATED WITH CHLORINATION/DECHLORINATION.

AVAILABILITY: JOURNAL WATER POLLUTION CONTROL FEDERATION;

V57 N8

IRIS ACCESSION NUMBER: EW012617

PUBLICATION DATE: 85

TITLE: SELECTING POLYMERIC FLOCCULANTS FOR WATER TREATMENT.

DESCRIPTOR: *FLOCCULATION; *FLOCCULANTS; *ECONOMICS; *OPERATIONS (WATER); *POLYMERS; *PERFORMANCE EVALUATION; *WATER TREATMENT

DESCRIPTIVE NOTE: 108-11P.

ABSTRACT: THIS ARTICLE DESCRIBES HOW FLOCCULANTS WORK AND HOW THEY ARE CHOSEN FOR WATER TREATMENT.

AVAILABILITY: PUBLIC WORKS; V116 N9

IRIS ACCESSION NUMBER: EW012618

PUBLICATION DATE: 85

TITLE: REGULATING SMALL QUANTITY HAZARDOUS WASTE GENERATORS.

PERSONAL AUTHOR: ROBINSON, JANET EL, CONN, W. DAVID

DESCRIPTOR: *HAZARDOUS WASTE GENERATORS; *HAZARDOUS WASTES; *FEDERAL ROLE; *LOCAL GOVERNMENTS; *PLANNING; *REGULATIONS; *TRANSPORTATION; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 110-12P.

ABSTRACT: NEW FEDERAL REGULATIONS WILL MEAN MORE INVOLVEMENT BY LOCAL GOVERNMENTS. THIS ARTICLE PRESENTS SOME REASONS WHY LOCAL GOVERNMENT SHOULD BE MORE INVOLVED AND SOME SUGGESTED ACTIONS.

AVAILABILITY: PUBLIC WORKS; V116 N9

IRIS ACCESSION NUMBER: EW012619

PUBLICATION DATE: 85

TITLE: STATION EMPLOYS GIANT SUBMERSIBLE PROPELLER PUMPS.

PERSONAL AUTHOR: JONES, CHARLES M.

DESCRIPTOR: *PUMPS; *STORMWATER; *SURFACE RUNOFF; *URBAN AREAS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 118-19P.

ABSTRACT: DESCRIBED ARE PUMPS USED BY A PENNSYLVANIA COMMUNITY TO RELIEVE PERIODIC FLOODING.

AVAILABILITY: PUBLIC WORKS; V116 N9

IRIS ACCESSION NUMBER: EW012620
PUBLICATION DATE: 85

TITLE: PORTLAND'S COMPOSTER-- ITS SUCCESSFUL INITIAL OPERATION.

PERSONAL AUTHOR: LANG, JOHN; DIXON, JAMES

DESCRIPTOR: *COSTS; *COMPOST; *COMPOSTING; *EQUIPMENT; *FACILITIES; *OREGON; *RECYCLING; *SLUDGE; *SEWAGE SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 123-27P.

ABSTRACT: DESCRIBED IS A COMPOSTING FACILITY IN PORTLAND, OREGON, THAT SAVED NEARLY $500,000 ANNUALLY IN WASTEWATER SLUDGE DISPOSAL COSTS.

AVAILABILITY: PUBLIC WORKS; V116 N9

IRIS ACCESSION NUMBER: EW012621

PUBLICATION DATE: 85

TITLE: COMPUTERIZATION OF SEWER MAINTENANCE SCHEDULING PART 1 - PRINCIPLES OF OPERATION.

PERSONAL AUTHOR: SCHAAF, JAMES R.

DESCRIPTOR: *CALIFORNIA; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *COSMO; *MAINTENANCE; *OPERATIONS (WASTEWATER); *SEWERS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 128-29P.

ABSTRACT: THIS ARTICLE REVIEWS PRINCIPLES OF OPERATION OF A COMPUTERIZED SEWER MAINTENANCE PROGRAM. THIS ARTICLE IS PART 1 OF A TWO PART SERIES.

AVAILABILITY: PUBLIC WORKS; V116 N9

IRIS ACCESSION NUMBER: EW012622

PUBLICATION DATE: 85

TITLE: ECONOMICAL AND EFFECTIVE MEASURES FOR LAKE PROTECTION AND MANAGEMENT.

PERSONAL AUTHOR: SINGH, KRISHAN P.; SEFTON, DONNA F.

DESCRIPTOR: *ECONOMICS; *LAKE PROTECTION; *LAKES; *MANAGEMENT; *MULTIPLE USE; *NATURAL RESOURCES; *PLANNING; *RECREATION; *WATER QUALITY; *WATER RESOURCES

DESCRIPTIVE NOTE: 132-38P.

ABSTRACT: FIELD-TESTED TECHNIQUES FOR LAKE PROTECTION AND MANAGEMENT ARE DESCRIBED. GUIDELINES FOR ASSIGNING VALUE FOR GENERAL RECREATION BENEFIT ARE INCLUDED.

AVAILABILITY: PUBLIC WORKS; V116 N9

IRIS ACCESSION NUMBER: EW012623

PUBLICATION DATE: 85

TITLE: A SLUDGE DISPOSAL PROGRAM SAMPLER.

PERSONAL AUTHOR: KIRCHER, JAMES R.

DESCRIPTOR: *LAND APPLICATION; *SLUDGE; *SLUDGE DISPOSAL; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 55-57P.

ABSTRACT: READERS OF THIS JOURNAL REPORT ON THEIR LANDSPREADING PROGRAMS.

AVAILABILITY: PUBLIC WORKS; V116 N10

IRIS ACCESSION NUMBER: EW012624

PUBLICATION DATE: 85

TITLE: DESIGN OF AN ENCLOSED COMPOSTING REACTOR.

PERSONAL AUTHOR: RUSSELL, DAVID L.

DESCRIPTOR: *COMPOSTING; *COMPOSTING REACTORS; *EQUIPMENT; *SEWAGE SLUDGE; *SLUDGE; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 59-63P.

ABSTRACT: DESCRIBED IS A MODULAR COMPOSTING REACTOR OF UNDER 10 CU. YD. CAPACITY THAT MEETS THE NEEDS OF A SMALL COMMUNITY.

AVAILABILITY: PUBLIC WORKS; V116 N10

IRIS ACCESSION NUMBER: EW012625

PUBLICATION DATE: 85

TITLE: COMPUTERIZATION OF SEWER MAINTENANCE SCHEDULING PART 2--PRELIMINARY RESULTS.

PERSONAL AUTHOR: SCHAAF, JAMES R.

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER PROGRAMS; *COSTS; *MAINTENANCE; *PROGRAM EVALUATION; *SEWERS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 64-66P.

ABSTRACT: THE EXPERIENCE OF THREE DISTRICTS USING A SYSTEM OF COMPUTER PROGRAMS FOR SEWER MAINTENANCE OPERATIONS IS DISCUSSED.

AVAILABILITY: PUBLIC WORKS; V116 N10

IRIS ACCESSION NUMBER: EW012626

PUBLICATION DATE: 85

TITLE: STUDY SHOWS HOW TO CUT CHEMICAL AND SLUDGE HAULING COSTS.

PERSONAL AUTHOR: BOTTS, J. MICHAEL

DESCRIPTOR: *CHEMICAL CONDITIONING; *COSTS; *OPERATIONS (WASTEWATER); *POLYMERS; *SLUDGE; *SLUDGE CONDITIONING; *SLUDGE HANDLING; *WASTE DISPOSAL; WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 66-67P.

ABSTRACT: DESCRIBED IS A POLYMER FEEDING SYSTEM FOR WASTEWATER TREATMENT THAT REDUCES COSTS.

AVAILABILITY: PUBLIC WORKS; V116 N10

IRIS ACCESSION NUMBER: EW012627

PUBLICATION DATE: 85

TITLE: NEW METHOD OF FILTRATION MONITORING.

PERSONAL AUTHOR: MONK, ROBERT D. G.; GAGNON, A. PETER

DESCRIPTOR: *FILTRATION; *HYDRAULICS; *MONITORING; *OPERATIONS (WATER); *WATER TREATMENT

DESCRIPTIVE NOTE: 68-72P.

ABSTRACT: DESCRIBED IS A NEW METHOD FOR MONITORING HYDRAULIC HEAD LOSSES.

AVAILABILITY: PUBLIC WORKS; V116 N10

IRIS ACCESSION NUMBER: EW012628

PUBLICATION DATE: 85

TITLE: IN DEFENSE OF PACKAGE PLANTS.

PERSONAL AUTHOR: DORAN, VINCENT J.

DESCRIPTOR: *MAINTENANCE; *MANAGEMENT; *PACKAGE PLANTS; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 4-5P.

ABSTRACT: THE AUTHOR PRESENTS A DISCUSSION OF PACKAGE PLANTS AND ATTEMPTS TO RESPOND TO AN ARTICLE IN THE MAY 1985 FORUM ON PACKAGE PLANTS.

AVAILABILITY: OPERATIONS FORUM; V2 N9

IRIS ACCESSION NUMBER: EW012629
PUBLICATION DATE: 85

TITLE: BURTON'S MANHOLE PREPARATION.

PERSONAL AUTHOR: LOOMIS, ROGER

DESCRIPTOR: *MAINTENANCE; *MANHOLES; *SAFETY; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 15P.

ABSTRACT: DESCRIBED IS WHAT ONE VILLAGE DID TO MAKE THEIR MANHOLE PROCEDURES SAFE.

AVAILABILITY: OPERATIONS FORUM; V2 N9

IRIS ACCESSION NUMBER: EW012630

PUBLICATION DATE: 85

TITLE: SODIUM HYPOCHLORITE HAZARDS.

PERSONAL AUTHOR: FISICHELLI, ANDREW P.

DESCRIPTOR: *ACCIDNET PREVENTION; *CHLORINE; *SAFETY; *SODIUM HYPOCHLORITE

DESCRIPTIVE NOTE: 16P.

ABSTRACT: DESCRIBED ARE SOME OF THE POTENTIAL PROBLEMS THAT CAN OCCUR FROM THE HANDLING OF CHLORINE AND COMPOUNDS CONTAINING CHLORINE.

AVAILABILITY: OPERATIONS FORUM; V2 N9

IRIS ACCESSION NUMBER: EW012631

PUBLICATION DATE: 85

TITLE: CONFINED SPACE SENSE.

PERSONAL AUTHOR: DORSEY, DONALD

DESCRIPTOR: *ACCIDENT PREVENTION; *MAINTENANCE; *OPERATIONS (WASTEWATER); $SAFETY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 17-18P.

ABSTRACT: SAFETY PROBLEMS RELATED TO WORKING IN CONFINED SPACES ARE CONSIDERED. USEFUL RULES FOR SAFETY ARE LISTED.

AVAILABILITY: OPERATIONS FORUM; V2 N9

IRIS ACCESSION NUMBER: EW012632
PUBLICATION DATE: 85

TITLE: DESIGNING FOR SAFETY.

DESCRIPTOR: *ACCIDENT PREVENTION; *DESIGN; *EQUIPMENT; *FACILITIES; *OPERATIONS (WASTEWATER); *SAFETY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 19P.

ABSTRACT: SAFETY SHOULD BE CONSIDERED WHEN DESIGNING FACILITIES. THREE EXAMPLES ARE ILLUSTRATED.

AVAILABILITY: OPERATIONS FORUM; V2 N9

IRIS ACCESSION NUMBER: EW012633

PUBLICATION DATE: 85

TITLE: PAINTING YOUR EQUIPMENT TO LAST.

PERSONAL AUTHOR: LENHART, CHARLES F.

DESCRIPTOR: *COSTS; *EQUIPMENT; *MAINTENANCE; *PAINTING

DESCRIPTIVE NOTE: 11-13P.

ABSTRACT: THIS ARTICLE PROVIDES TIPS ON PAINTING TO PROTECT A TREATMENT SYSTEM.

AVAILABILITY: OPERATIONS FORUM; V2 N8

IRIS ACCESSION NUMBER: EW012634

PUBLICATION DATE: 85

TITLE: FIVE EASY COATINGS.

PERSONAL AUTHOR: KYRK, RANDY; ZABOLSKI, BILL

DESCRIPTOR: *COATINGS; *MAINTENANCE; *PAINTS; *PERFORMANCE EVALUATION

DESCRIPTIVE NOTE: 14-16P.

ABSTRACT: THIS ARTICLE DESCRIBES FIVE TYPES OF COATINGS (ALKYDS, WATER REDUCIBLES, EPOXIES, VINYLS, AND POLYURETHANES). THE PROPERTIES OF EACH ARE DISCUSSED AND SOME ADVANTAGES AND DISADVANTAGES ARE CONSIDERED.

AVAILABILITY: OPERATIONS FORUM; V2 N8

IRIS ACCESSION NUMBER: EW012635
PUBLICATION DATE: 85

TITLE: STENCILS STAND OUT.

PERSONAL AUTHOR: KLAUSEGGER, R. B.

DESCRIPTOR: *ACCIDENT PREVENTION; *EQUIPMENT IDENTIFICATION; *SAFETY; *STENCILS

DESCRIPTIVE NOTE: 17P.

ABSTRACT: THIS ARTICLE BRIEFLY DESCRIBES THE USE OF STENCILS FOR SAFETY AND CLARIFYING OPERATIONS.

AVAILABILITY: OPERATIONS FORUM; V2 N8

IRIS ACCESSION NUMBER: EW012636

PUBLICATION DATE: 85

TITLE: WASTEWATER COMPUTERS: AN UPDATE (O&M SOFTWARE).

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *DATA MANAGEMENT; *MAINTENANCE; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 18-19P.

ABSTRACT: THIS ARTICLE CONSIDERS SOME OF THE DIFFERENT TYPES OF COMPUTER SOFTWARE AND PRESENTS A LIST OF OPERATION AND MAINTENANCE SOFTWARE. SOURCES OF THE SOFTWARE ARE LISTED.

AVAILABILITY: OPERATIONS FORUM; V2 N8

IRIS ACCESSION NUMBER: EW012637

PUBLICATION DATE: 85

TITLE: 7 INNOVATIVE IDEAS.

PERSONAL AUTHOR: FISHER, JOHN E.

DESCRIPTOR: *CLEANING; *EQUIPMENT; *MAINTENANCE; *OPERATIONS (WASTEWATER); *SAMPLING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 20-21P.

ABSTRACT: SEVEN IDEAS FOR IMPROVING OPERATIONS OF WASTEWATER TREATMENT FACILITIES ARE DESCRIBED.

AVAILABILITY: OPERATIONS FORUM; V2 N8

IRIS ACCESSION NUMBER: EW012638
PUBLICATION DATE: 85

TITLE: SOFTWARE FOR MAINTENANCE MANAGEMENT--PART 2.

PERSONAL AUTHOR: BLACKWELL, LARRY G.; LANGWORTHY, VIRGIL W.

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *MAINTENANCE; *MANAGEMENT; EQUIPMENT; INVENTORIES; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 22P.

ABSTRACT: DESCRIBED ARE WAYS A COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM CAN HELP IMPROVE WASTEWATER TREATMENT OPERATIONS. SOME OF THE ITEMS TO INCLUDE IN A SOFTWARE PROGRAM ARE INCLUDED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N10

IRIS ACCESSION NUMBER: EW012639

PUBLICATION DATE: 85

TITLE: MILE-DEEP REACTOR DESTROYS SLUDGE WITH EASE.

PERSONAL AUTHOR: RAPPE , GERALD C.; SCHWOYER, WILLIAM L.

DESCRIPTOR: *OXIDATION SLUDGE DESTRUCTION; *SLUDGE; *WASTE DISPOSAL; *TECHNOLOGY; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 27-29P.

ABSTRACT: A NOVEL MUNICIPAL SLUDGE DESTRUCTION PROCESS CAN ALSO TREAT TOXIC CONTAMINATED INDUSTRIAL SLUDGES. THE OPERATION IN LONGMONT, COLORADO IS DESCRIBED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N10

IRIS ACCESSION NUMBER: EW012640

PUBLICATION DATE: 85

TITLE: COMPUTER ASSIST FOR ACTIVATED SLUDGE PROCESS.

PERSONAL AUTHOR: KECK, H. S.; AND OTHERS

DESCRIPTOR: *ACTIVATED SLUDGE; *CLARIFIERS; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PROCESS CONTROLS; *WASTETRAX; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 30-33, 36-37P.

ABSTRACT: IT IS FEASIBLE TO BACK UP TREATMENT FACILITY STAFF WITH A MICROCOMPUTER FOR PROCESS CONTROL. DESCRIBED ARE SOME WAYS OF USING COMPUTER CONTROLS FOR THE ACTIVATED SLUDGE PROCESS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N10

IRIS ACCESSION NUMBER: EW012641

PUBLICATION DATE: 85

TITLE: MAKING EFFECTIVE USE OF EXISTING COLLECTION CAPACITY.

PERSONAL AUTHOR: NELSON, RICHARD E.; NOGAJ, RICHARD J.

DESCRIPTOR: COSTS; *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; ECONOMICS; *MODELS; *MANAGEMENT; *PLANNING; *SEWERS; *WASTEWATER COLLECTION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 30-40P.

ABSTRACT: ALTERNATE ROUTING OF RELIEF SEWERS CAN BE EVALUATED USING COMPUTER-BASED MODELING TECHNIQUES. SAVINGS CAN BE MADE BY MORE EFFECTIVE USE OF EXISTING SEWERS RATHER THAN CONSTRUCTING NEW SEWERS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N10

IRIS ACCESSION NUMBER: EW012642

PUBLICATION DATE: 85

TITLE: SAGGING SEWERS: A SERIOUS PROBLEM GETTING WORSE.
PERSONAL AUTHOR: CHATTERJEE, SAMAR; DECARLO, FRANK

DESCRIPTOR: *CONSTRUCTION; *DESIGN; *MAINTENANCE; *RESEARCH NEEDS; *SEWERS; *WASTEWATER COLLECTION

DESCRIPTIVE NOTE: 42-44P.

ABSTRACT: THIS PHENOMENON, THOUGHT TO BE INSIGNIFICANT, MAY BE A DEVASTATING SEWER SYSTEM PROBLEM. THE AUTHORS DISCUSS THE PROBLEM, THE NEED FOR BETTER CONSTRUCTION, AND THE NEED FOR FURTHER RESEARCH.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N10

IRIS ACCESSION NUMBER: EW012643

PUBLICATION DATE: 85

TITLE: ENERGY AND PROFIT: PRODUCTS OF COGENERATION.

PERSONAL AUTHOR: MOKE, HAROLD C.

DESCRIPTOR: *COSTS; *ECONOMICS; *ENERGY; *COGENERATION; *MANAGEMENT; *OPERATIONS (WASTEWATER); *SLUDGE DRYING; *RESOURCE RECOVERY; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 46-48P.

ABSTRACT: APPLYING THIS CONCEPT CAN RESULT IN THE SALE OF ELECTRIC POWER AND HEAT PRODUCTION FOR IN-PLANT POWER NEEDS. APPLICATIONS TO WASTEWATER TREATMENT OPERATIONS ARE DISCUSSED.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N10

IRIS ACCESSION NUMBER: EW012644

PUBLICATION DATE: 85

TITLE: WHICH TYPE BUBBLE AERATION FOR WISCONSIN PLANT: COARSE OR FINE?

PERSONAL AUTHOR: CAVAGNARO, PETER; SUN, JYH-WEI

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *AERATION; *BUBBLE AERATION; *COSTS; *LIQUID WASTES; *MAINTENANCE; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 14-16P.

ABSTRACT: THIS ARTICLE PRESENTS INFORMATION ON THE USE OF FINE OR COARSE BUBBLE AERATION FOR THE TREATMENT OF LIQUID WASTES.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N8

IRIS ACCESSION NUMBER: EW012645
PUBLICATION DATE: 85

TITLE: SOFTWARE FOR MAINTENANCE MANAGEMENT.

PERSONAL AUTHOR: BLACKWELL, LARRY G.; LANGWORTHY, VIRGIL W.

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *MAINTENANCE; *MANAGEMENT; *UTILITIES; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 22P.

ABSTRACT: DESCRIBED ARE ITEMS THAT SHOULD BE INCLUDED IN A COMPUTER SOFTWARE PROGRAM FOR MAINTENANCE MANAGEMENT.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N8

IRIS ACCESSION NUMBER: EW012646

PUBLICATION DATE: 85

TITLE: MODEL YOUR WAY TO ENERGY SAVINGS.

PERSONAL AUTHOR: RUSHBROOK, EDWARD L., JR.

DESCRIPTOR: *COSTS; *ENERGY AUDITS; *ENERGY CONSERVATION; *MANAGEMENT; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 32-34P.
ABSTRACT: DESCRIBED IS A METHOD FOR ANALYZING ENERGY CONSUMPTION THAT CAN HELP A PLANT OPERATE ON LESS ENERGY AND SAVE COSTS.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N8

IRIS ACCESSION NUMBER: EW012647

PUBLICATION DATE: 85

TITLE: ACCURATE REAGENT FEED HELPS CONTROL SLUDGE CONVERSION PROCESS.

DESCRIPTOR: *CHEMICAL FIXATION; *MICROPROCESSERS; *CHEMFIX; *NATURITE; *PROCESS CONTROL; *RESOURCE RECOVERY; *SLUDGE; *WASTE DISPOSAL; *WASTEWATER TREATMENT; WASHINGTON D.C.

DESCRIPTIVE NOTE: 36-37P.

ABSTRACT: MICROPROCESSOR-BASED MATERIAL FEEDING DEVICES ALONG WITH A PATENTED CHEMICAL FIXATION PROCESS, CONVERT SLUDGE TO A USABLE PRODUCT.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N8

IRIS ACCESSION NUMBER: EW012648

PUBLICATION DATE: 85

TITLE: CHINESE SHOW HOW DAF CAN REDUCE MLSS.

PERSONAL AUTHOR: ZHANG, YUQING

DESCRIPTOR: *CLARIFICATION; *DISSOLVED AIR ROTATION; *CHINA; *INDUSTRIAL WASTES; *OPERATIONS (WASTEWATER); *WASTEWATER TREATMENT; *WOOLEN MILLS

DESCRIPTIVE NOTE: 38-42P.

ABSTRACT: A VISITING SCHOLAR DESCRIBES A SUCCESSFUL APPLICATION OF DISSOLVED AIR FLOTATION TO CLARIFICATION OF MIXED-LIQUOR SUSPENDED SOLIDS IN A CHINESE WOOLEN MILL.

AVAILABILITY: WATER ENGINEERING AND MANAGEMENT; V132 N8

IRIS ACCESSION NUMBER: EW012649

PUBLICATION DATE: 85

TITLE: ACTIVATED SLUDGE TREATMENT. 1982-MARCH 1985 (CITATIONS FROM THE LIFE SCIENCES COLLECTION DATA BASE).

DESCRIPTOR: *ACTIVATED SLUDGE; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *DOMESTIC WASTES; *INDUSTRIAL WASTES; *OPERATIONAL WASTES; *OPERATIONS (WASTEWATER); *PERFORMANCE EVALUATION; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 85P. PRICE CODE: PC N01/MF N01
ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE ACTIVATED SLUDGE PROCESS IN TREATING INDUSTRIAL AND DOMESTIC WASTE. APPARATUS DESIGN, PARAMETERS FOR EFFECTIVENESS, AND ORGANISMS UTILIZED IN THE VARIOUS PROCESSES ARE AMONG THE TOPICS DISCUSSED. PERFORMANCE EVALUATIONS AND APPLICATIONS OF TREATMENT PROCESSES FOR THE PURIFICATION AND REMOVAL OF UNWANTED SUBSTANCES FROM SEWAGE AND WASTEWATER ARE INCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 107 CITATIONS, 36 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012650

PUBLICATION DATE: 85

TITLE: AERIAL PHOTOGRAPHY: APPLICATIONS IN THE STUDY OF COASTAL EROSION AND POLLUTION. 1974-MAY 1985 (CITATIONS FROM OCEANIC ABSTRACTS).

DESCRIPTOR: *AERIAL PHOTOGRAPHY; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *COASTAL EROSION; *MONITORING; *OCEANOGRAPHY; *SHORELINES; *WATER POLLUTION

DESCRIPTIVE NOTE: 193P. PRICE CODE: PC N01/MF N01

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE APPLICATIONS OF AERIAL PHOTOGRAPHY IN THE STUDY OF COASTAL SHORELINE PROBLEMS SUCH AS EROSION AND POLLUTION. TOPICS INCLUDE OCEAN WAVE DIRECTION AND MEASUREMENT, OIL POLLUTION DETECTION AND DIRECTION FORECASTING, SHORELINE CHANGE MEASUREMENTS, COASTAL MAPPING, AND COASTAL TOPOGRAPHIC FEATURES. (THIS UPDATED BIBLIOGRAPHY CONTAINS 301 CITATIONS, 184 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012651

PUBLICATION DATE: 85

TITLE: ANIMAL WASTE POLLUTION, TREATMENT, AND REGULATIONS. 1977-JUNE 1985 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BAS

DESCRIPTOR: *ANIMAL WASTE POLLUTION; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *FARM WASTES; *INDUSTRIAL WASTES; POLLUTION CONTROL; *REGULATIONS; RESEARCH; *WASTE DISPOSAL; *WASTE TREATMENT; *WATER POLLUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 316P. PRICE CODE: PC N01/MF N01

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING FARM WASTEWATER TREATMENT, UTILIZATIONS, AND REGULATIONS.

FARM WATER QUALITY MANAGEMENT, FEEDLOT POLLUTION CONTROL, REGULATIONS ON FEEDLOT OPERATIONS, AND FARM WASTEWATER UTILIZATIONS ARE DISCUSSED. FARM NONPOINT POLLUTION SOURCES AND CONTROL, EFFECTS OF PASTURE RUNOFF, PESTICIDES, AND LIVESTOCK WASTES ON WATER QUALITY, AND RESEARCH ON THE BIOLOGICAL TREATMENT OF WASTEWATER ARE CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 314 CITATIONS, 11 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012652

PUBLICATION DATE: 85

TITLE: APPLICATIONS. 1977-JULY 1985 (CITATIONS FROM THE RUBBER AND PLASTICS RESEARCH ASSOCIATION DATA BASE).

DESCRIPTOR: *ANION EXCHANGE; *ANION EXCHANGE RESINS; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *RESINS; *FORMULATION; *STRUCTURE; *WATER TREATMENT

DESCRIPTIVE NOTE: 86P. PRICE CODE: PC N01/MF N01

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE FORMULATION AND SYNTHESIS OF ANION EXCHANGE RESINS BASED ON SUCH RESINS AS AMIDES, POLYETHYLENES, AND STYRENES. OSMOTIC PROPERTIES, EXCHANGE KINETICS BEHAVIOR, SORPTION PROPERTIES, STRUCTURE STUDIES, AND TEMPERATURE RELATED PERFORMANCE EFFECTS ON ANION EXCHANGE RESINS ARE CONSIDERED. ANION EXCHANGE CHROMATOGRAPHY OF METALS AND LIQUIDS, AND APPLICATIONS IN WATER PURIFICATION AND POLLUTION CONTROL ARE INCLUDED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 101 CITATIONS, 25 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012653

PUBLICATION DATE: 85

TITLE: AQUATIC POPULATION DYNAMICS. 1978-JULY 1985 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: ANALYTICAL TECHNIQUES; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *AQUATIC POPULATION DYNAMICS; *ECOLOGY; MODELING; *WATER POLLUTION

DESCRIPTIVE NOTE: 296P. PRICE CODE: PC N01/MF N01

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING AQUATIC POPULATION DYNAMICS. TOPICS INCLUDE PREDATORY-PREY RELATIONSHIPS, POPULATION ECOLOGY, LABORATORY CULTURE, WATER POLLUTION EFFECTS, SEASONAL VARIATION, AND NUTRIENTS BIOASSAY. TROPIC DYNAMICS, FOOD CHAINS, SPECIES DIVERSITY, BOTTOM SEDIMENTS, NUTRIENT CYCLING, MORTALITY EFFECTS, LIFE HISTORY STUDIES, MODELING, AND ANALYTICAL TECHNIQUES ARE DISCUSSED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 282 CITATIONS, 107 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012654

PUBLICATION DATE: 85

TITLE: BACTERIAL METAL LEACHING AND BIOACCUMULATION. 1978-JUNE 1985 (CITATIONS FROM THE LIFE SCIENCES COLLECTION DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; *BIBLIOGRAPHIES; BACTERIA; *BACTERIAL METAL LEACHING; *BIOACCMULATION; *EFFLUENTS; METALS; *METAL LEACHING; *METAL RECOVERY

DESCRIPTIVE NOTE: 200P. PRICE CODE: PC N01/MF N01

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING BACTERIAL STRAINS UTILIZED IN METAL LEACHING FROM EFFLUENTS, AND THEIR ROLE IN METAL RECOVERY PROCESSES. FACTORS AFFECTING BACTERIAL GROWTH SUCH AS TEMPERATURE, PH, AND OXYGEN CONSUMPTION ARE DISCUSSED. THE ISOLATION OF BACTERIA SUITABLE FOR THESE PROCESSES IS CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 265 CITATIONS, 73 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012655

PUBLICATION DATE: 85

TITLE: BIOLOGICAL EFFECTS OF MICROWAVE RADIATION. 1975-JAN 1984 (CITATIONS FROM THE INSPEC: INFORMATION SERVICES FOR THE PHYSICS AND ENG

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *BIOLOGICAL EFFECTS; *HEALTH EFFECTS; *MICROWAVES; *RADIATION

DESCRIPTIVE NOTE: 256P. PRICE CODE: PC N01/MF N01

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE SHORT AND LONG TERM EFFECTS OF MICROWAVE RADIATION. THE PHYSIOLOGICAL EFFECTS OF THERMAL STRESS ARE CONSIDERED. EXPERIMENTAL DATA, INCLUDING METHODOLOGY AND EVALUATION, ARE ALSO CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 303 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012656

PUBLICATION DATE: 85

TITLE: BIOLOGICAL EFFECTS OF MICROWAVE RADIATION. FEB 1984-MAY 1985 (CITATIONS FROM THE INSPEC: INFORMATION SERVICES FOR THE PHYSICS AND

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *BIOLOGICAL EFFECTS; *HEALTH EFFECTS; *MICROWAVES; *RADIATION

DESCRIPTIVE NOTE: 76P. PRICE CODE: PC N01/MF N01

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE SHORT AND LONG TERM EFFECTS OF MICROWAVE RADIATION. THE PHYSIOLOGICAL EFFECTS OF THERMAL STRESS ARE CONSIDERED. EXPERIMENTAL DATA, INCLUDING METHODOLOGY AND EVALUATION, ARE ALSO CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 74 CITATIONS, ALL OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012657

PUBLICATION DATE: 85

TITLE: BIOLOGICAL EFFECTS OF MICROWAVES. 1978-JULY 1985 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *BIOLOGICAL EFFECTS; *HEALTH EFFECTS; *MICROWAVES; *RADIATION

DESCRIPTIVE NOTE: 187P. PRICE CODE: PC N01/MF N01

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE BIOLOGICAL EFFECTS ON MAN AND ANIMALS RESULTING FROM EXPOSURE TO MICROWAVE RADIATION. TOPICS INCLUDE EFFECTS ON THERMOREGULATION, DOSAGE EFFECTS, SAFETY STANDARDS, AND RADIATION TOLERANCE STUDIES. RADIATION FOR A WIDE RANGE OF MICROWAVE FREQUENCIES IS CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 213 CITATIONS, 48 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

IRIS ACCESSION NUMBER: EW012658

PUBLICATION DATE: 85

TITLE: CADMIUM POLLUTION. MAY 1983-MAY 1985 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *AIR POLLUTION; *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ENVIRONMENTAL EFFECTS; *CADMIUM; *DETECTION; *POLLUTION CONTROL; *MONITORING; *WATER POLLUTION

DESCRIPTIVE NOTE: 264P. PRICE CODE: PC N01/MF N01

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING AIR AND WATER POLLUTION BY CADMIUM. TOPICS INCLUDE DETECTION, MONITORING, AND ANALYSIS OF CADMIUM IN THE ENVIRONMENT. ALSO INCLUDED ARE TOPICS ON SOURCES, CONTROL TECHNIQUES, EMISSIONS, TRANSPORT PROPERTIES, TOXICITY, AND EFFECTS STUDIES, FOR PLANTS, ANIMALS, AND HUMANS. (THIS UPDATED BIBLIOGRAPHY CONTAINS 259 CITATIONS, ALL OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012659

PUBLICATION DATE: 84

TITLE: CETIS: COMPLEX EFFLUENTS TOXICITY INFORMATION SYSTEM. DATA ENCODING GUIDELINES AND PROCEDURES.

PERSONAL AUTHOR: CRANE J. L.; AND OTHERS

DESCRIPTOR: CETIS; *COMPLEX EFFLUENT TOXICITY INFORMATION SYSTEMS; *DATABASES; *DATA ENCODING; *EFFLUENTS; *GUIDELINES; *INFORMATION SYSTEMS; *PROCEDURES; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 67P. PRICE CODE: PC A04/MF A01

ABSTRACT: THE COMPUTERIZED COMPLEX EFFLUENT TOXICITY INFORMATION SYSTEM (CETIS) DATA BASE INCLUDES DATA EXTRACTED FROM AQUATIC BIOASSAY REPRINTS AS WELL AS FACILITY AND RECEIVING WATER INFORMATION. DATA REFERENCES ARE OBTAINED FROM BOTH PUBLISHED PAPERS AND FROM UNPUBLISHED RESULTS OF TESTS CONDUCTED BY STATE OR REGIONAL ENVIRONMENTAL OFFICES. PROCEDURES FOR EXTRACTING AND RECORDING DATA BASED ON THE CETIS DATA ELEMENT GUIDELINES ARE DISCUSSED IN DETAIL.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012660

PUBLICATION DATE: 84

TITLE: CHEMICAL SLUDGE CONDITIONING.

PERSONAL AUTHOR: LAYER W.; AND WANG L. K.

DESCRIPTOR: *CHEMICAL SLUDGE CONDITIONING; COSTS; *OPERATIONS (WASTEWATER); *SLUDGE; *SLUDGE CONDITIONING; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: PORTIONS OF THIS DOCUMENT ARE NOT FULLY LEGIBLE. PRICE CODE: PC A02/MF A01

ABSTRACT: A NEW LOOK AT SLUDGE CONDITIONING IS PRESENTED. ADVANTAGES AND DISADVANTAGES OF ORGANIC POLYMERS AND INORGNAIC CHEMICALS ARE DISCUSSED. SPECIAL EMPHASIS IS PLACED ON PROCEDURES FOR CHEMICAL PREPARATION, SLUDGE PREPARATION, SLUDGE TESTING, CHEMICAL DOSAGE DETERMINATION, AND COST ESTIMATION. THIS IS A USEFUL MANUAL ON CHEMICAL SLUDGE CONDITIONING.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012661

PUBLICATION DATE: 84

TITLE: CONCEPTS IN MARINE POLLUTION MEASUREMENTS.

PERSONAL AUTHOR: WHITE, H. H.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *LABORATORY PROCEDURES; *MARINE POLLUTION; *MEASUREMENTS; *MONITORING; *OCEANOGRAPHY; *WATER QUALITY

DESCRIPTIVE NOTE: 744P. PRICE CODE: PC A99/MF E03

ABSTRACT: CONCEPTS IN MARINE POLLUTION MEASUREMENTS EXAMINES A RANGE OF TECHNIQUES FOR MEASURING MARINE POLLUTION AND ITS EFFECTS ON THE ENVIRONMENT. THE FORTY-THREE PAPERS HAVE BEEN GROUPED UNDER THE FOLLOWING CATEGORIES: TOXICITY TESTS; LABORATORY MICROCOSMS; COMMUNITY PARAMETERS AND MEASURES OF COMMUNITY IMPACT; BIOACCUMULATION TESTS; CHEMICAL MEASUREMENTS AND EFFECTS CRITERIA; ANOMALIES IN FIELD SPECIMENS; MESOCOSMS AND FIELD SYSTEMS; FIELD MONITORING PROGRAMS; SUMMARY AND SYNTHESIS.

AVAILABILITY: EQ INSTRUCTIONAL RESOURCES CENTER, THE OHIO STATE UNIVERSITY, 1200 CHAMBERS ROAD, ROOM 310, COLUMBUS, OH 43212

IRIS ACCESSION NUMBER: EW012662

PUBLICATION DATE: 85

TITLE: CONTROL OF MICROORGANISMS OF PUBLIC HEALTH CONCERN IN WATER.

PERSONAL AUTHOR: GELDREICH, E. E.

DESCRIPTOR: *MICROORGANISMS; *PUBLIC HEALTH; *WASTEWATER TREATMENT; *WATER TREATMENT; *WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 22P. PRICE CODE: PC A02/MF A01

ABSTRACT: MICROORGANISMS OF PUBLIC HEALTH CONCERN IN WATER CAN BE CONTROLLED BY TREATMENT PROCESS TECHNOLOGY CURRENTLY AVAILABLE. WHERE OUTBREAKS HAVE OCCURRED, THE CAUSE HAS BEEN A DEMONSTRATED FAILURE IN WASTEWATER OR WATER SUPPLY TREATMENT OPERATION OR DISTRIBUTION PROTECTION. WHILE NATURAL SELF-PURIFICATION IN RECEIVING WATERS CAN BE AN IMPORTANT BUFFER BETWEEN WASTE EFFLUENT DISCHARGES AND WATER SUPPLY INTAKES, THE FRAGILE NATURE OF THE ASSOCIATED PHENOMENA CANNOT BE A SUBSTITUTION FOR ADEQUATE WASTE TREATMENT. ESSENTIAL TO MAXIMUM PUBLIC HEALTH SAFEGUARDS IS THE USE OF A MULTIPLE BARRIER CONCEPT THAT RELIES ON ESTABLISHING PROTECTIVE SYSTEMS BETWEEN THE WATER USER AND SOURCES OF POTENTIAL CONTAMINATION.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012663

PUBLICATION DATE: 84

TITLE: CORPORATE USE OF INFORMATION REGARDING NATURAL RESOURCES AND ENVIRONMENTAL QUALITY.

PERSONAL AUTHOR: TRAIN, R. E.

DESCRIPTOR: *CORPORATIONS; *ENVIRONMENTAL QUALITY; *INFORMATION SOURCES; *INFORMATION USE; *INFORMATION NEEDS; *NATURAL RESOURCES; *SURVEYS

DESCRIPTIVE NOTE: 97P. PRICE CODE: PC A05/MF A01

ABSTRACT: THIS REPORT PRESENTS FINDINGS AND RECOMMENDATIONS FROM A ONE-YEAR STUDY OF THE CORPORATE USE OF INFORMATION REGARDING NATURAL RESOURCES AND ENVIRONMENTAL QUALITY. PERSONAL INTERVIEWS WERE CONDUCTED WITH 229 INFORMATION USERS AT 45 OF AMERICA'S LARGEST CORPORATIONS, TRADE ASSOCIATIONS, AND PRIVATE INFORMATION COMPANIES. IN ADDITION, 110 INFORMATION USERS PARTICIPATED IN A WRITTEN SURVEY. OUR PRINCIPAL FINDINGS ARE: (1) US CORPORATIONS URGENTLY NEED MORE INTERNATIONAL DATA; (2) US CORPORATIONS FEEL THAT THE GOVERNMENT'S NATURAL RESOURCE FORECASTS ARE NOT CREDIBLE; (3) US CORPORATIONS NEED UPGRADED AND EXPANDED DATA ON ENVIRONMENTAL QUALITY; (4) US CORPORATIONS BELIEVE THAT GOVERNMENT INFORMATION IS NOT TIMELY; (5) INFORMATION ON NATURAL RESOURCES AND ENVIRONMENTAL QUALITY IS VITAL TO THE SUCCESS OF US CORPORATIONS; (6) US CORPORATIONS DEPEND ON A LARGE BODY OF THIS INFORMATION IN MAKING DECISIONS REGARDING CAPACITY, SITING, MARKETING, PRODUCTION, AND STRATEGIC PLANNING AMONG OTHERS; AND (7) THE US GOVERNMENT IS THE PRINCIPAL SOURCE OF INFORMATION ON NATURAL RESOURCES AND ENVIRONMENTAL QUALITY. (EPA CITATION 10:011186)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012664

PUBLICATION DATE: 84

TITLE: COST-EFFECTIVE DESIGN AND OPERATION OF URBAN STORMWATER CONTROL SYSTEMS: DECISION-SUPPORT SOFTWARE.

PERSONAL AUTHOR: LABADIE, J. W.; AND OTHERS

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *DESIGN; *PLANNING; *OPERATIONS (WASTEWATER); *SEWERS; *STORMWATER; *STORMWATER CONTROL SYSTEMS; *URBAN AREAS

DESCRIPTIVE NOTE: 207P. PRICE CODE: PC A10/MF A01. ORDER NO.: PB85-203941/WEP

ABSTRACT: ALTHOUGH THE MICROCOMPUTER REVOLUTION HAS MADE POWERFUL COMPUTER HARDWARE AVAILABLE AT LOW COST, THERE IS STILL A SEVERE LAG IN THE AVAILABILITY OF COMPUTER SOFTWARE THAT CAN AID URBAN WATER MANAGERS IN FINDING COST-EFFECTIVE SOLUTIONS TO COMPLEX DESIGN AND OPERATIONAL PROBLEMS IN STORMWATER AND COMBINED SEWER CONTROL. A STORMWATER CONTROL PACKAGE (SWCP) IS PRESENTED WITH USER MANUAL FOR INTRODUCING AUTOMATION INTO URBAN STORMWATER CONTROL SYSTEMS. THE PACKAGE CONTAINS STATE-OF-THE-ART TECHNOLOGY IN STORM INFLOW FORECASTING, FULLY DYNAMIC HYDRAULIC ROUTING, AND DYNAMIC PROGRAMMING OPTIMIZATION. IT IS DESIGNED FOR 'SIMULATED' REAL-TIME EXPERIMENTATION ON APPLICATION OF AUTOMATION TO STORM AND COMBINED SEWER CONTROL FOR ACHIEVING IMPROVED PERFORMANCE. IN ADDITION, IT IS BELIEVED THAT APPLICATION OF THE SWCP AT THE PLANNING LEVEL CAN POTENTIALLY SAVE LARGE AMOUNTS OF CAPITAL IN SIZING OF FACILITIES THROUGH OPTIMUM REGULATION IN REAL-TIME OF STORAGE AND CONVEYANCE OF STORMWATER. COMPUTATIONAL EXPERIENCE WITH THE NORTH SHORE OUTFALLS AND CHANNEL OUTFALLS CONSOLIDATION PROJECTS OF THE CLEAN WATER PROGRAM OF SAN FRANCISCO IS PRESENTED. IN ADDITION TO OPERATIONAL SOFTWARE, AN OPTIMAL SEWER DESIGN PACKAGE CALLED CSUDP/SEWER IS PRESENTED WITH USER MANUAL WHICH ALSO EMPLOYS DYNAMIC PROGRAMMING. AS A SCREENING TOOL, PROGRAM CSUDP/SEWER CAN FIND LEAST-COST VERTICAL LAYOUTS AND SIZINGS OF STORM DRAINAGE SYSTEMS. PRELIMINARY EXPERIENCE WITH AN OPTIMAL HORIZONTAL LAYOUT PROCEDURE WHICH COMBINES NONLINEAR PROGRAMMING, NETWORK FLOW THEORY AND CSUDP/SEWER IS ALSO PRESENTED, BUT MORE TESTING WITH LARGE NETWORKS IS NEEDED FOR THIS ALGORITHM.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012665

PUBLICATION DATE: 85

TITLE: DESIGN OF A STATEWIDE GROUNDWATER MONITORING NETWORK FOR ILLINOIS.

PERSONAL AUTHOR: O'HEARN, M.; AND SCHOCK, S. C.

DESCRIPTOR: *CONTAMINATION; *GROUNDWATER; *ILLINOIS; *MONITORING; *MONITORING NETWORKS; *WATER RESOURCES

DESCRIPTIVE NOTE: 84P. PRICE CODE: PC A05/MF A01. ORDER NO.: PB85-192821/WEP

ABSTRACT: THIS REPORT DOCUMENTS THE DESIGN OF A GROUNDWATER MONITORING NETWORK FOR PRINCIPAL AQUIFERS IN ILLINOIS. THE OBJECTIVE OF THIS NETWORK IS TO IDENTIFY AND ASSESS EXISTING GROUNDWATER RESOURCE PROBLEMS IN ILLINOIS' HIGHEST YIELDING AQUIFERS AND TO PROVIDE BASE LINE DATA IN UNEFFECTED AREAS TO DETECT FUTURE GROUNDWATER PROBLEMS. THE PROPOSAL NETWORK IS BASED UPON THE MONITORING OF 1300 PUBLIC WATER SUPPLY WELLS AND INCORPORATES A THREE TIER PRIORITIZATION SYSTEM TO DETERMINE THE DEGREE TO WHICH MAJOR AQUIFERS SHOULD BE MONITORED FOR ORGANIC AND INORGANIC CONTAMINANTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012666

PUBLICATION DATE: 84

TITLE: DESIGN OF A WATER RESOURCES TRAINING PROGRAM FOR OPERATION, MAINTENANCE AND MANAGEMENT.

PERSONAL AUTHOR: WATT, M. H.; AND OTHERS

DESCRIPTOR: CERTIFICATION; CURRICULUM; *MAINTENANCE; *MANAGEMENT; *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *TRAINING PROGRAMS; TRAINING; WATER RESOURCES; *WASTEWATER TREATMENT; *WATER TREATMENT; WASHINGTON, D.C.

DESCRIPTIVE NOTE: 222P. PRICE CODE: PC A10/MF A01. ORDER NO.: PB85-157600/WEP

ABSTRACT: A LONG-TERM TRAINING PROGRAM WAS DESIGNED FOR OPERATING PERSONNEL IN THREE BUREAUS (WATER SERVICES, SEWER SERVICES, AND WASTEWATER TREATMENT) WITHIN THE WATER RESOURCES MANAGEMENT ADMINISTRATION (WRMA), A DIVISION OF THE D.C. DEPARTMENT OF ENVIRONMENTAL SERVICES (DES). THE PROJECT CONSISTED OF: AN ANALYSIS OF THE AGENCY'S STRUCTURE; A SURVEY OF THE EMPLOYEES BACKGROUND; A SURVEY OF JOB AND TASK REQUIREMENTS; AN ASSESSMENT AND DOCUMENTATION OF TRAINING NEEDS BASED ON WORKERS AND SUPERVISORS VIEWS; ANALYSIS OF JOB AND PERFORMANCE FUNCTIONS; AND THE IMPLEMENTATION OF A PILOT PROGRAM AIMED AT PROVIDING INFORMATION ABOUT THE TRAINING LEVEL OF WORKERS, TRAINEES AND SUPERVISORS ACCEPTANCE, SELECTION OF TRAINING METHODS, TRAINING FACILITIES, AND OTHER FACTORS RELATING TO A LONG-TERM TRAINING PROGRAM. RECOMMENDATIONS ON A COMPREHENSIVE LONG-TERM CURRICULUM LEADING TO CERTIFICATION ARE PROVIDED.
AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012667

PUBLICATION DATE: 85

TITLE: DETECTION AND IDENTIFICATION OF "GIARDIA" CYSTS USING IMMUNOFLUORESCENCE AND PHASE CONTRAST MICROSCOPY.

PERSONAL AUTHOR: SAUCH, J. A.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; DETECTION; GIARDIA; *GIARDIA CYSTS; IDENTIFICATION; *IMMUNOFLUORESCENCE; *LABORATORY PROCEDURES; *PHASE CONTRAST MICROSCOPY; *WATER QUALITY

DESCRIPTIVE NOTE: 13P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB85-155877/WEP

ABSTRACT: DETECTION AND IDENTIFICATION OF GIARDIA CYSTS IN WATER SAMPLES HAS BEEN IMPROVED BY THE DEVELOPMENT OF AN IMMUNOFLUORESCENT METHOD THAT SPECIFICALLY STAINS GIARDIA CYSTS BRIGHT GREEN AND ALLOWS THEIR EASY DETECTION AGAINST A BLACK BACKGROUND. THE REPORT DISCUSSES ASPECTS OF THE METHOD - REAGENTS AND INSTRUMENTATION - THAT MUST BE CONSIDERED AND OPTIMIZED BY ANYONE WANTING TO ADOPT THIS TECHNIQUE FOR THE DETECTION OF GIARDIA CYSTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012668

PUBLICATION DATE: 85

TITLE: DETERMINATION OF MBTS AND TCMTB IN INDUSTRIAL AND MUNICIPAL WASTEWATER.

PERSONAL AUTHOR: WARNER, J. S.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *MBTS; *LABORATORY PROCEDURES; *INDUSTRIAL EFFLUENTS; *MUNICIPAL EFFLUENTS; *TCMTB; *WASTEWATER

DESCRIPTIVE NOTE: 46P. PRICE CODE: PC A03/MF A01. ORDER NO.: PB85-189025/WEP

ABSTRACT: A METHOD WAS DEVELOPED FOR THE DETERMINATION OF MBTS AND TCMTB IN WASTEWATERS. THE METHOD DEVELOPMENT PROGRAM CONSISTED OF: A LITERATURE REVIEW; DETERMINATION OF EXTRACTION EFFICIENCY FOR EACH COMPOUND FROM WATER INTO METHYLENE CHLORIDE; DEVELOPMENT OF A DEACTIVATED SILICA GEL CLEANUP PROCEDURE; AND DETERMINATION OF SUITABLE HIGH PERFORMANCE LIQUID CHROMATOGRAPHIC (HPLC) ANALYSIS CONDITIONS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012669

PUBLICATION DATE: 85

TITLE: DETERMINATION OF NATURAL NITROGEN-CONTAINING PESTICIDES IN INDUSTRIAL AND MUNICIPAL WASTEWATERS - FENARIMOL, MGK 264, MGK 326, AND

PERSONAL AUTHOR: WARNER, J. S.; AND OTHERS

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *FENARIMOL; *INDUSTRIAL WASTES; *INDUSTRIAL EFFLUENTS; *LABORATORY PROCEDURES; *PESTICIDES; *PRONAMIDE; *WASTEWATER

DESCRIPTIVE NOTE: 60P. PRICE CODE: PC A04/MF A01. ORDER NO.: PB85-189157/WEP

ABSTRACT: A METHOD WAS DEVELOPED FOR THE DETERMINATION OF FOUR NEUTRAL NITROGEN-CONTAINING COMPOUNDS (FENARIMOL MGK 264, MGK 326, AND PRONAMIDE) IN WASTEWATERS. THE METHOD DEVELOPMENT PROGRAM CONSISTED OF: A LITERATURE REVIEW, DETERMINATION OF EXTRACTION EFFICIENCY FOR EACH COMPOUND FROM WATER INTO CLEANUP PROCEDURE, AND DETERMINATION OF SUITABLE GAS CHROMATOGRAPHIC ANALYSIS CONDITIONS. THE FINAL METHOD WAS APPLIED TO WASTEWATERS FROM A MANUFACTURER OF FENARIMOL AND A MANUFACTURER OF PRONAMIDE IN ORDER TO DETERMINE THE PRECISION OF ACCURACY OF THE METHOD.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012670

PUBLICATION DATE: 84

TITLE: DEVELOPMENT OF A GENERAL PLANNING METHODOLOGY FOR STORM WATER MANAGEMENT IN URBAN WATERSHEDS.

PERSONAL AUTHOR: ORMSBEE, L. E.; AND OTHERS

DESCRIPTOR: *ILLINOIS; *MANAGEMENT; *PLANNING; *STORMWATER; *SURFACE RUNOFF; *URBAN AREAS

DESCRIPTIVE NOTE: 215P. PRICE CODE: PC A10/MF A01. ORDER NO.: PB85-161412/WEP

ABSTRACT: A NEW METHODOLOGY IS DEVELOPED FOR USE IN THE PLANNING OF DUAL PURPOSE DETENTION BASINS IN URBAN WATERSHEDS. THE METHODOLOGY EMPLOYS CONTINUOUS SIMULATION, STATISTICAL ANALYSIS, AND A GENERAL DESIGN HEURISTIC TO OBTAIN AN INTEGRATED SYSTEM OF DETENTION BASINS. BOTH WATER QUANTITY AND WATER QUALITY CONSTRAINTS MAY BE CONSIDERED. SEVERAL DIFFERENT APPROACHES WERE CONSIDERED IN THE DEVELOPMENT OF THE DESIGN HEURISTIC. THE DEVELOPED METHODOLOGY USES A DYNAMIC PROGRAM TO OBTAIN A FEASIBLE STARTING POINT FOR A NONLINEAR SEARCH ALGORITHM. THE NONLINEAR SEARCH ALGORITHM EMPLOYS THE COMPLEX METHOD OF BOX. THE GENERAL PLANNING METHODOLOGY WAS APPLIED TO AN ACTUAL WATERSHED IN GLEN ELLYN, ILLINOIS, AND TO A SYNTHETIC WATERSHED THAT WAS CONSTRUCTED FROM AVERAGE GEOMORPHIC DATA FOR THE STATE OF INDIANA.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012671

PUBLICATION DATE: 85

TITLE: ECOLOGY OF PESTICIDE WATER POLLUTION. 1970-JULY 1985 (CITATIONS FROM THE NTIS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ECOLOGY; *ENVIRONMENTAL IMPACT; *PESTICIDES; *WATER POLLUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 288P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-864494/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE OCCURRENCE, DISTRIBUTION, AND BIOLOGICAL EFFECTS OF PESTICIDES IN THE AQUATIC ENVIRONMENT. THE EFFECTS OF SPECIFIC SUBSTANCES ON SPECIFIC SPECIES, TRANSPORT MECHANISMS, DEGRADATION STUDIES, AND AQUATIC ECOSYSTEM RESPONSE INVESTIGATIONS ARE AMONG THE TOPICS INCLUDED. MARINE AND FRESHWATER ENVIRONMENTS ARE CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 306 CITATIONS, 60 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE; 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012673

PUBLICATION DATE: 84

TITLE: EPA (ENVIRONMENTAL PROTECTION AGENCY) RESEARCH PROGRAM GUIDE, FY-1985, OCTOBER 1, 1984-SEPTEMBER 30, 1985.

DESCRIPTOR: *AIR POLLUTION CONTROL; *HAZARDOUS WASTES; *PROGRAM DESCRIPTIONS; *RESEARCH; *USEPA; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 75P. PRICE CODE: PC A04/MF A01. ORDER NO.: PB85-181881/WEP

ABSTRACT: THE DESCRIPTIONS CONTAINED IN THIS RESEARCH PROGRAM GUIDE FOR FY'85 ARE ORGANIZED BY MEDIUM SUCH AS AIR, WATER, OR HAZARDOUS WASTE. EACH DESCRIPTION IS A BROAD SUMMARY OF THE RESEARCH BEING DONE, WHERE THAT RESEARCH IS BEING DONE, WHO TO CONTACT FOR MORE INFORMATION ABOUT THE PROGRAM, AND BOTH THE APPROXIMATE TOTAL FUNDING FOR THAT AREA AND THE PERCENTAGE OF TOTAL FUNDING WHICH IS RESERVED BY EPA FOR IN-HOUSE RESEARCH. FUNDING NOT RESERVED FOR IN-HOUSE RESEARCH IS SPENT THROUGH EXTRAMURAL CONTRACTS, GRANTS, AND COOPERATIVE AGREEMENTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012674

PUBLICATION DATE: 85

TITLE: EPA-SUPPORTED (ENVIRONMENTAL PROTECTION AGENCY SUPPORTED) WASTELOAD ALLOCATION MODELS.

PERSONAL AUTHOR: BARNWELL, T. O.; BOYNTON, D. K.

DESCRIPTOR: *COMPUTER APPLICATIONS; *COMPUTER SOFTWARE; *MODELING; *MODELS; *TRAINING; *USEPA; *WASTELOAD ALLOCATION; *WATER QUALITY

DESCRIPTIVE NOTE: 13P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB85-189702/WEP

ABSTRACT: MODELING IS INCREASINGLY BECOMING PART OF THE WASTELOAD ALLOCATION PROCESS. THE U.S. EPA PROVIDES GUIDANCE, TECHNICAL TRAINING AND COMPUTER SOFTWARE IN SUPPORT OF THIS PROGRAM. THIS PAPER REVIEWS THE SUPPORT AVAILABLE TO MODELERS THROUGH THE WASTELOAD ALLOCATION SECTION OF EPA'S OFFICE OF WATER REGULATION AND STANDARDS AND THROUGH THE CENTER FOR WATER QUALITY MODELING OF EPA'S OFFICE OF RESEARCH AND DEVELOPMENT. THE PAPER ALSO LOOKS TO THE FUTURE OF WATER QUALITY MODELING AND THE PROSPECT FOR PRINCIPLES FROM ARTIFICIAL INTELLIGENCE INCREASING THE ACCESSIBILITY OF THESE TOOLS TO PRACTITIONERS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012675

PUBLICATION DATE: 85

TITLE: EUTROPHICATION: WATER QUALITY AND POLLUTION CONTROL. 1970-APR 1985 (CITATIONS FROM THE ENGINEERING INDEX DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; ECOLOGY; ENVIRONMENTAL EFFECTS; *EUTROPHICATION; MATHEMATICAL MODELING; MONITORING; *WATER POLLUTION CONTROL; *WATER QUALITY

DESCRIPTIVE NOTE: 121P. PRICE CODE: PC N01/MF A01. ORDER NO.: PB85-857905/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING EUTROPHIC ANALYSIS, ASSESSMENT, EFFECTS, CONTROL, AND SURVEILLANCE OF INLAND AND COASTAL WATERS. EUTROPHICATION CAUSES, TREATMENT, PREDICTIONS, AND ECONOMICS ARE ALSO DISCUSSED. APPLICATIONS OF ECOLOGICAL DYNAMICS AND MATHEMATICAL MODELS FOR EUTROPHICATION CONTROL OF WATERS ARE CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 161 CITATIONS, 21 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012676

PUBLICATION DATE: 85

TITLE: FEDERAL REGISTER. PART 2. OFFICE OF SCIENCE AND TECHNOLOGY POLICY. CHEMICAL CARCINOGENS: A REVIEW OF THE SCIENCE AND ITS ASSOCI

DESCRIPTOR: *CARCINOGENS; *CHEMICALS; *FEDERAL REGISTER; *GUIDELINES; *RISK ASSESSMENT

DESCRIPTIVE NOTE: 89P. PRICE CODE: PC A05/MF A01. ORDER NO.: PB85-232031/WEP

ABSTRACT: THE OFFICE OF SCIENCE AND TECHNOLOGY POLICY HAS PREPARED THE DOCUMENT TO BE USED AS A FRAMEWORK FOR REGULATORY AGENCIES IN ASSESSING CANCER RISKS FROM CHEMICALS. THE DOCUMENT DOES NOT ATTEMPT TO FORMULATE POLICY OR DEVELOP STANDARDIZED METHODS OF RISK ASSESSMENT. IT TRIES TO DEFINE PRINCIPLES, BASED UPON CURRENT SCIENTIFIC INFORMATION, TO SERVE AS GUIDELINES IN CERTAIN MATTERS WHEN CONSIDERING CARCINOGENS. THE PRESENT DOCUMENT IS THE CULMINATION OF DRAFTS EXTENSIVELY REVIEWED BY GOVERNMENTAL AND NON-GOVERNMENTAL SCIENTISTS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012677
PUBLICATION DATE: 85

TITLE: FILTRATION OF 'GIARDIA' CYSTS AND OTHER SUBSTANCES. VOLUME 2. SLOW SAND FILTRATION.

PERSONAL AUTHOR: BELLAMY, W. D.; AND OTHERS

DESCRIPTOR: *BACTERIA; *FILTRATION; *GIARDIA; *RESEARCH; *SAND FILTRATION; *WATER TREATMENT

DESCRIPTIVE NOTE: 329P. PRICE CODE: PC A15/MF A01. ORDER NO.: PB85-191633/WEP

ABSTRACT: SLOW SAND FILTRATION RESEARCH WAS CONDUCTED AT COLORADO STATE UNIVERSITY IN TWO PHASES, USING 1 FOOT DIAMETER FILTERS. PHASE I RESULTS SHOWED REMOVAL OF GIARDIA CYSTS EXCEEDED 99.9 PERCENT FOR THE THREE HYDRAULIC LOADING RATES USED. THE MOST IMPORTANT OPERATING CONDITION WAS THE DEVELOPMENT OF A BIOPOPULATION WITHIN THE SAND BED. REMOVAL OF TOTAL COLIFORM BACTERIA RELATED WELL TO THE DEVELOPMENT OF THE BIOPOPULATION WITHIN THE SAND BED SHOWING, 90 PERCENT REMOVAL FOR A NEW SAND BED OPERATED AT 0.40 M/HR FILTRATION RATE, AND 99.99 PERCENT REMOVAL FOR A MATURE SAND BED AND ESTABLISHED SCHMUTZDECKE OPERATED AT 0.04 M/HR. IN PHASE II REMOVALS OF TOTAL COLIFORM BACTERIA RANGED FROM 60 PERCENT FOR THE FILTER MAINTAINED WITH NO BIOLOGICAL ACTIVITY (E.G., CHLORINATED BETWEEN TESTS), TO 99.9 PERCENT FOR THE FILTER HAVING NUTRIENTS ADDED. REMOVAL FOR THE CONTROL FILTER REMOVAL AVERAGED 97 PERCENT.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012678

PUBLICATION DATE: 85

TITLE: FORMALDEHYDE. JUNE 1976-JULY 1985 (CITATIONS FROM THE ENERGY DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *CHEMICALS; *FORMALDEHYDE; *HEALTH EFFECTS; *PUBLIC HEALTH

DESCRIPTIVE NOTE: 138P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-863785/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING THE CHEMICAL AND PHYSICAL PROPERTIES OF, AND APPLICATIONS FOR, FORMALDEHYDE. THE HEALTH EFFECTS OF FORMALDEHYDE EXPOSURE ARE ALSO CONSIDERED. (THIS UPDATED BIBLIOGRAPHY CONTAINS 142 CITATIONS, 34 OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012679
PUBLICATION DATE: 85

TITLE: FISHERIES: ENVIRONMENTAL ASPECTS. 1977-NOV 1983 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ECOLOGY; *ENVIRONMENT; *FISHERIES; *FISH; *RESEARCH; *SHELLFISH

DESCRIPTIVE NOTE: 305P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-858538/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING RESEARCH AND EXPERIMENTATION OF ENVIRONMENT EFFECTS OF FISHERIES, FISH HATCHERIES, AND MARINE WILDLIFE SERVICES. PRIMARY EMPHASIS IS ON FISH AND SHELLFISH, WITH SOME CITATIONS PERTAINING TO BENTHIC INVERTEBRATES. EFFECTS OF WEATHER, TEMPERATURE, AQUATIC TOXINS, CONSTRUCTION, EUTROPHICATION, NUTRIENTS, WATER LEVELS, WATER CHEMISTRY, AND SUCH POLLUTANTS AS OIL SPILLS, HEAVY METALS, CHEMICAL WASTES AND HERBICIDES ARE DISCUSSED. TOLERANCES BY FISH TO THESE ENVIRONMENTAL CHANGES TO THEIR HABITAT, REPRODUCTIVE CYCLES, AND ATTEMPTS TO REHABILITATE THE AQUATIC HABITATS ARE CONSIDERED. (THIS BIBLIOGRAPHY CONTAINS 315 CITATIONS, NONE OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012680

PUBLICATION DATE: 85

TITLE: FISHERIES: ENVIRONMENTAL ASPECTS. DEC 1983-APR 1985 (CITATIONS FROM THE SELECTED WATER RESOURCES ABSTRACTS DATA BASE).

DESCRIPTOR: *ANNOTATED BIBLIOGRAPHIES; BIBLIOGRAPHIES; *ECOLOGY; *ENVIRONMENT; *FISHERIES; *FISH; *RESEARCH; *SHELLFISH

DESCRIPTIVE NOTE: 65P. PRICE CODE: PC N01/MF N01. ORDER NO.: PB85-858546/WEP

ABSTRACT: THIS BIBLIOGRAPHY CONTAINS CITATIONS CONCERNING RESEARCH AND EXPERIMENTATION OF ENVIRONMENT EFFECTS OF FISHERIES, FISH HATCHERIES, AND MARINE WILDLIFE SERVICES. PRIMARY EMPHASIS IS ON FISH AND SHELLFISH, WITH SOME CITATIONS PERTAINING TO BENTHIC INVERTEBRATES. EFFECTS OF WEATHER, TEMPERATURE, AQUATIC TOXINS, CONSTRUCTION, EUTROPHICATION, NUTRIENTS, WATER LEVELS, WATER CHEMISTRY, AND SUCH POLLUTANTS AS OIL SPILLS, HEAVY METALS, CHEMICAL WASTES AND HERBICIDES ARE DISCUSSED. TOLERANCES BY FISH TO THESE ENVIRONMENTAL CHANGES TO THEIR HABITAT, REPRODUCTIVE CYCLES, AND ATTEMPTS TO REHABILITATE THE AQUATIC HABITATS ARE CONSIDERED. (THIS BIBLIOGRAPHY CONTAINS 51 CITATIONS, ALL OF WHICH ARE NEW ENTRIES TO THE PREVIOUS EDITION.)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285

PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012692

PUBLICATION DATE: 84

TITLE: INTERORGANIZATIONAL RELATIONS AND DECISION MAKING AMONG SECTION 208 WATER QUALITY MANAGEMENT PLANNING AGENCIES.

PERSONAL AUTHOR: POTTER, H. R.; AND SCHWEER, H. M.

DESCRIPTOR: *DECISION MAKING; FEDERAL GOVERNMENT; INDUSTRY; LOCAL GOVERNMENT; *MANAGEMENT; *ORGANIZATIONS; *PLANNING; *PROGRAM EVALUATION; *RESEARCH REPORTS; *SURVEYS; STATE GOVERNMENT; *WATER QUALITY; VOLUNTEER ORGANIZATIONS

DESCRIPTIVE NOTE: 70P. PRICE CODE: PC A04/MF A01. ORDER NO.: PB85-161420/WEP

ABSTRACT: THIS IS A STUDY OF MANDATED INTERORGANIZATIONAL RELATIONS (IOR). THIS IS IN CONSTRAST TO MOST IOR STUDIES THAT HAVE ASSUMED VOLUNTARY RELATIONS AMONG ORGANIZATIONS. SPECIFICALLY THE FOCUS IS ON ORGANIZATIONS INVOLVED IN A FEDERALLY MANDATED WATER QUALITY MANAGEMENT PLANNING PROGRAM. DATA ARE FROM INTERVIEWS WITH 39 PERSONS IN 33 ORGANIZATIONS IN THREE LOCI: (A) A DESIGNATED PLANNING AREA, (B) A NON-DESIGNATED PLANNING AREA AND (C) PERSONS IN POSITIONS WITH STATE WIDE RESPONSIBILITIES. THE GREATEST INVOLVEMENT WAS IN THE DESIGNATED AREA, AMONG STATE AND FEDERAL ORGANIZATIONS, AND AMONG AGRICULTURAL AND ENVIRONMENTAL VOLUNTARY ORGANIZATIONS. THERE WAS LITTLE INVOLVEMENT BY LOCAL GOVERNMENT AND INDUSTRY. LENGTH OF TIME NECESSARY FOR PROGRAM PLANNING AND IMPLEMENTATION, CONTINUITY AND SOURCES OF FUNDS, AND LOCAL SUPPORT ARE THREE MAJOR FACTORS THAT STAND OUT AS IMPORTANT TO MODIFY IN FED.-STATE-LOCAL RELATIONS IN FUTURE PROGRAMS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012695

PUBLICATION DATE: 78

TITLE: MANUAL FOR EVALUATING CONTAMINATION POTENTIAL OF SURFACE IMPOUNDMENTS.

PERSONAL AUTHOR: SILKA, L. R.; AND SWEARINGEN, T. L.

DESCRIPTOR: *CONTAMINATION; *DRINKING WATER; *EVALUATION SYSTEMS; *GROUNDWATER; *MANUALS; *SURFACE WATER; *USEPA; *WATER SUPPLY; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 86P. PRICE CODE: PC A05/MF A01. ORDER NO.: PB85-211423/WEP

ABSTRACT: THE MANUAL WAS SPECIFICALLY PREPARED FOR IMPLEMENTING A STANDARDIZED EVALUATION SYSTEM FOR THE EPA OFFICE OF DRINKING WATER SURFACE IMPOUNDMENT ASSESSMENT. THE MANUAL DESCRIBES A FIRST ROUND EVALUATION SYSTEM FOR RATING THE GROUNDWATER CONTAMINATION POTENTIAL OF SURFACE IMPOUNDMENTS. THE EVALUATION SYSTEM CONTAINS EIGHT STEPS: RATING THE UNSATURATED ZONE, RATING THE GROUND WATER AVAILABILITY, RATING THE GROUNDWATER QUALITY, RATING THE WASTE HAZARD POTENTIAL, COMPUTING THE OVERALL GROUNDWATER CONTAMINATION POTENTIAL, RATING THE POTENTIAL ENDANGERMENT TO CURRENT USERS OF THE GROUNDWATER, RATING THE INVESTIGATOR'S CONFIDENCE IN THE DATA, MISCELLANEOUS IDENTIFIERS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012699

PUBLICATION DATE: 85

TITLE: METHODOLOGY FOR RANKING THE DEGREE OF HAZARD ASSOCIATED WITH EXPOSURE TO CARCINOGENS AND OTHER TOXIC CHEMICALS.

PERSONAL AUTHOR: ANDERSON, E. L.; AND OTHERS

DESCRIPTOR: *CARCINOGENS; *CHEMICALS; *HAZARDOUS MATERIALS; *RISK ASSESSMENT; *TOXIC SUBSTANCES

DESCRIPTIVE NOTE: 57P. PRICE CODE: PC A04/MF A01. ORDER NO.: PB85-167906/WEP

ABSTRACT: A HAZARD INDEX IS AN OVERALL INDICATOR OF THE POTENTIAL HARM OF A HAZARDOUS SUBSTANCE TO HUMANS AND THE ENVIRONMENT. THIS PAPER DESCRIBES THE USE OF A CARCINOGENICITY INDEX AND A SYSTEMIC (CHRONIC) TOXICITY INDEX IN SETTING REPORTABLE QUANTITIES UNDER SECTION 101(14) OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) OF 1980. THE THREE TYPES OF EVIDENCE USED TO EVALUATE A SUBSTANCE'S CARCINOGENIC HAZARD ARE (1) EPIDEMIOLOGICAL, (2) EXPERIMENTAL AND (3) SUPPORTIVE EVIDENCE FROM SHORT-TERM TESTS, METABOLISM AND PHARMACOKINETICS AND STRUCTURE-ACTIVITY CORRELATIONS. ABOUT 200 POTENTIAL CARCINOGENS AND 200 CHEMICALS ASSOCIATED WITH OTHER DISEASES HAVE BEEN EVALUATED AND ASSIGNED A HAZARD RANKING.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012700

PUBLICATION DATE: 85

TITLE: METHODS FOR MEASURING THE ACUTE TOXICITY OF EFFLUENTS TO FRESHWATER AND MARINE ORGANISMS.

PERSONAL AUTHOR: PELTIER, W. H.; AND WEBER, C. I.

DESCRIPTOR: *ANALYTICAL TECHNIQUES; *EFFLUENTS; *FIELD TECHNIQUES; *GUIDELINES; *LABORATORY PROCEDURES; *MARINE BIOLOGY; *TOXIC SUBSTANCES; *TOXICITY TESTS

DESCRIPTIVE NOTE: 234P. PRICE CODE: PC A11/MF A01. ORDER NO.: PB85-205383/WEP

ABSTRACT: THIS MANUAL DESCRIBES METHODS FOR MEASURING THE ACUTE TOXICITY OF EFFLUENTS TO FRESHWATER AND MARINE MACROINVERTEBRATES AND FISH. THE METHODS INCLUDE A PRELIMINARY RANGE-FINDING TEST, A SCREENING TEST, AND MULTI-CONCENTRATION (DEFINITIVE) STATIC AND FLOW-THROUGH TOXICITY TESTS. ALSO INCLUDED ARE GUIDELINES ON LABORATORY SAFETY, QUALITY ASSURANCE, FACILITIES AND EQUIPMENT, EFFLUENT SAMPLING AND HOLDING, DILUTION WATER, TEST SPECIES SELECTION AND HANDLING, DATA INTERPRETATION AND UTILIZATION, REPORT PREPARATION, TEST ORGANISM CULTURING, DILUTOR AND MOBILE BIOASSAY LABORATORY DESIGN AND CALIBRATION, AND EQUIPMENT CHECK LISTS AND COMPUTER PROGRAMS FOR CALCULATING THE LC50 AND CONFIDENCE INTERVALS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012702

PUBLICATION DATE: 85

TITLE: MODELING REMEDIAL ACTIONS AT UNCONTROLLED HAZARDOUS WASTE SITES.

PERSONAL AUTHOR: BOUTWELL, S. H.; AND OTHERS

DESCRIPTOR: *GUIDELINES; *HAZARDOUS WASTES; *MODELS; *REMEDIAL ACTIONS; *SITE EVALUATION; *WASTE CONTROL; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 463P. PRICE CODE: PC A20/MF A01. ORDER NO.: PB85-211357/WEP

ABSTRACT: THE DOCUMENT PROVIDES GUIDANCE ON THE SELECTION AND USE OF MODELS FOR THE PURPOSE OF EVALUATING THE EFFECTIVENESS OF REMEDIAL ACTIONS AT UNCONTROLLED HAZARDOUS WASTE SITES. IT CONSISTS OF FOUR SECTIONS, EACH COVERING A SPECIFIC FACET ON MODELING REMEDIAL ACTIONS, INCLUDING SELECTION OF MODELS, AND THE USE OF SIMPLIFIED, ANALYTICAL, AND NUMERICAL MODELS FOR THE EVALUATION OF SUBSURFACE, WASTE CONTROL, AND SURFACE WATER REMEDIAL ACTIONS. THIS DOCUMENT PROVIDES A COMPREHENSIVE SET OF GUIDELINES TO REGULATORY OFFICIALS FOR THE INCORPORATION OF MODELS INTO THE REMEDIAL ACTION PLANNING PROCESS AT FEDERAL AND STATE SUPER FUND SITES.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012703

PUBLICATION DATE: 84

TITLE: MOUNTAIN COMMUNITIES WASTEWATER MANAGEMENT ALTERNATIVES REPORT. VOLUME 1. SUMMARY DOCUMENT.

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *COSTS; *ECONOMICS; *ENGINEERING TECHNIQUES; *FUNDING SOURCES; *MANAGEMENT; *MOUNTAIN AREAS; *RURAL AREAS; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 25P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB85-169001/WEP

ABSTRACT: THIS ALTERNATIVES REPORT IS AN INTERIM DOCUMENT IN THE MOUNTAIN COMMUNITIES WASTEWATER MANAGEMENT ASSESSMENT. THE REPORT IDENTIFIES AND DISCUSSES AVAILABLE ENGINEERING TECHNIQUES, MANAGEMENT SYSTEMS, AND FINANCIAL ALTERNATIVES APPROPRIATE FOR USE IN MOUNTAIN COMMUNITIES. FOLLOWING IDENTIFICATION AND DESCRIPTION OF AVAILABLE TECHNICAL, MANAGEMENT AND FINANCIAL ALTERNATIVES, METHODOLOGIES ARE PRESENTED FOR SELECTING THE MOST APPROPRIATE ALTERNATIVES FOR A GIVEN SITUATION. THE REPORT IS PRESENTED IN FOUR VOLUMES: VOLUME I SUMMARY DOCUMENT.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012704

PUBLICATION DATE: 84

TITLE: MOUNTAIN COMMUNITIES WASTEWATER MANAGEMENT ALTERNATIVES REPORT. VOLUME 2. TECHNICAL ENGINEERING ALTERNATIVES.

DESCRIPTOR: *ALTERNATIVE TECHNOLOGY; *ENGINEERING TECHNIQUES; *MANAGEMENT; *MOUNTAIN AREAS; *RURAL AREAS; *TECHNOLOGY; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 160P. PRICE CODE: PC A08/MF A01. ORDER NO.: PB85-169019/WEP

ABSTRACT: THIS VOLUME CONTAINS CHAPTER 3--TECHNICAL ENGINEERING ALTERNATIVES. CHAPTER THREE DESCRIBES APPLICABLE TECHNICAL APPROACHES TO WASTEWATER MANAGEMENT IN SMALL MOUNTAINOUS COMMUNITIES BY SYSTEM TYPE (ON-SITE, CLUSTER, SMALL COMMUNITY AND CENTRALIZED). TABULAR SUMMARIES--FACT SHEETS--OF EACH SYSTEM ARE ALSO INCLUDED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012705

PUBLICATION DATE: 84

TITLE: MOUNTAIN COMMUNITIES WASTEWATER MANAGEMENT ALTERNATIVES REPORT. VOLUME 3. INSTITUTIONAL MANAGEMENT ALTERNATIVES.

DESCRIPTOR: *MANAGEMENT; *MOUNTAIN AREAS; *RURAL AREAS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 119P. PRICE CODE: PC A06/MF A01. ORDER NO.: PB85-169027/WEP

ABSTRACT: VOLUME III OF THE ALTERNATIVES DEVELOPMENT REPORT IS COMPRISED OF CHAPTER 4--'INSTITUTIONAL MANAGEMENT ALTERNATIVES'. THIS CHAPTER DEVELOPS AND DESCRIBES INSTITUTIONAL MANAGEMENT SYSTEMS WHICH MAY BE IMPLEMENTED TO MEET THE WASTEWATER TREATMENT AND DISPOSAL NEEDS OF MOUNTAIN COMMUNITIES. FACT SHEETS DESCRIBING THE KEY COMPONENTS OF EACH SYSTEM ARE ALSO INCLUDED. THIS CHAPTER INCLUDES A DISCUSSION OF THE VARIOUS FUNCTIONS WHICH MUST BE CARRIED OUT BY A MANAGEMENT AGENCY AND TECHNIQUES OR METHODS WHICH CAN BE EMPLOYED TO SUCCESSFULLY ACCOMPLISH THESE FUNCTIONS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012706

PUBLICATION DATE: 84

TITLE: MOUNTAIN COMMUNITIES WASTEWATER MANAGEMENT ALTERNATIVES REPORT. VOLUME 4. FINANCIAL ALTERNATIVES.

DESCRIPTOR: *COSTS; *ECONOMICS; *FUNDING SOURCES; *MANAGEMENT; *MOUNTAIN AREAS; *RURAL AREAS; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 207P. PRICE CODE: PC A10/MF A01. ORDER NO.: PB85-169035/WEP

ABSTRACT: THIS IS THE FINAL VOLUME OF THE MOUNTAIN COMMUNITIES WASTEWATER MANAGEMENT ASSESSMENT'S ALTERNATIVES DEVELOPMENT REPORT. THIS VOLUME CONTAINS CHAPTER 5 WHICH IDENTIFIES FEDERAL, STATE, LOCAL AND PRIVATE FUNDING SOURCES AVAILABLE TO MOUNTAIN COMMUNITIES AND PRESENTS A FACT SHEET SUMMARIZING KEY CHARACTERISTICS OF EACH APPLICABLE FINANCIAL TECHNIQUE. FINANCING CONSIDERATIONS FOR INNOVATIVE AND ALTERNATIVE SYSTEMS ARE DISCUSSED, AND A METHOD FOR SELECTING THE MOST APPROPRIATE FINANCING TECHNIQUE IN A GIVEN SITUATION IS PRESENTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012707

PUBLICATION DATE: 85

TITLE: NATIONAL SMALL QUANTITY HAZARDOUS WASTE GENERATOR SURVEY.

PERSONAL AUTHOR: RUDER, E.; AND OTHERS

DESCRIPTOR: *HAZARDOUS MATERIALS; *HAZARDOUS WASTES; *HAZARDOUS WASTE GENERATORS; *HAZARDOUS WASTE SOURCES; *INDUSTRY; *MANAGEMENT; *INDUSTRIAL WASTES; *SURVEYS; *WASTE DISPOSAL

DESCRIPTIVE NOTE: 170P. PRICE CODE: PC A08/MF A01. ORDER NO.: PB85-180438/WEP

ABSTRACT: THIS REPORT SUMMARIZES THE RESULTS OF A TWO-YEAR, NATIONWIDE SURVEY OF SMALL QUANTITY GENERATORS OF HAZARDOUS WASTE (I.E. ESTABLISHMENTS THAT PRODUCE LESS THAN 1,000 KILOGRAMS OF HAZARDOUS WASTE PER CALENDAR MONTH). THE REPORT INCLUDES GENERAL INFORMATION ON: THE NUMBER AND TYPES OF SMALL QUANTITY GENERATORS; THE TYPES AND QUANTITES OF WASTE THEY GENERATE; AND THE WAYS IN WHICH THE WASTES ARE HANDLED. THE REPORT ALSO CONTAINS WASTE CHARACTERIZATION AND MANAGEMENT PROFILES OF 22 PRINCIPAL INDUSTRIES CONTAINING SMALL QUANTITY GENERATORS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012708

PUBLICATION DATE: 84

TITLE: NITROGEN - A PROBLEM OF WATER CONSERVATION. ENVIRONMENTAL EFFECTS, EMISSION, PURIFICATION METHODS, COSTS.

PERSONAL AUTHOR: HAGLUND, K.; AND NORRMAN, J.

DESCRIPTOR: *AGRICULTURAL WASTES; *ENVIRONMENTAL EFFECTS; *FERTILIZER; *INDUSTRIAL WASTES; *NITROGEN; *PURIFICATION PROCESSES; *RESEARCH; *SWEDEN; *WASTEWATER; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 110P. PRICE CODE: PC A06/MF A01. ORDER NO.: DE85751457/WEP

ABSTRACT: THE NITROGEN CYCLE, PARTICULARLY NITRIFICATION AND DENITRIFICATION, IS DESCRIBED. THE EMISSION OF NITROGEN IN SWEDEN EMANATES FROM INDUSTRY, MUNICIPAL WASTE WATER, FERTILIZATION OF FORESTS AND FARMING GROUNDS. NITROGEN FROM AIR IS DISTRIBUTED VIA PRECIPITATION. EUTROPHICATION AND HEALTH HAZARDS ARE DISCUSSED. PURIFICATION PROCESSES, SUCH AS CHLORINATION, ION EXCHANGE, AMMONIA ELIMINATION AND REVERSE OSMOSIS AS WELL AS BIOLOGICAL PROCESSES FOR MINOR NITROGEN CONTENTS IN WASTEWATER ARE DESCRIBED. COMPARATIVE EVALUATIONS OF VARIOUS METHODS ARE MADE. RECOMMENDATIONS OF PREVENTIVE MEASURES ARE DISCUSSED. ABOVE 100 REFERENCES. (EPA CITATION 10:024320)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012709

PUBLICATION DATE: 84

TITLE: NUCLEAR WASTE MANAGEMENT AND THE USE OF THE SEA.

DESCRIPTOR: *LEGISLATION; *MANAGEMENT; *OCEANS; *OCEANOGRAPHY; *NUCLEAR WASTES; *RADIOACTIVE WASTES; *POLICIES; *WASTE DISPOSAL; *WORLD PROBLEMS

DESCRIPTIVE NOTE: 106P. PRICE CODE: PC A06/MF A01. ORDER NO.: PB85-202976/WEP

ABSTRACT: THIS REPORT REVIEWS THE CURRENT SITUATION ON NUCLEAR WASTE DISPOSAL POLICIES IN THE UNITED STATES AND ELSEWHERE AND RELATES THESE POLICIES TO IMPLICATIONS FOR THE OCEANS. THE REPORT DOES NOT COMMENT ON NUCLEAR POWER AS AN ENERGY SOURCE. IN A COMPREHENSIVE BACKGROUND INFORMATION SECTION, THE REPORT DESCRIBES THE WORLDWIDE INVENTORY OF RADIOACTIVE WASTE, THE VARYING TYPES OF RADIOACTIVE WASTES, INTERNATIONAL AND DOMESTIC LAWS GOVERNING RADIOACTIVE WASTE DISPOSAL, SCIENTIFIC ANALYSIS OF MARINE RADIOACTIVITY, AND POSSIBLE U.S. PROPOSALS ON OCEAN DISPOSAL OF NUCLEAR WASTE. DETAILED APPENDICES DESCRIBE NUCLEAR AND HEALTH PHYSICS, WASTE MANAGEMENT STRATEGIES OF OTHER NATIONS, PRIOR U.S. DUMPING OF RADIOACTIVE WASTES, SIGNATORIES TO THE LONDON DUMPING CONVENTION, SPECIFIC CASE HISTORIES, AMONG OTHERS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012719

PUBLICATION DATE: 85

TITLE: PLUMBING MATERIALS AND DRINKING WATER QUALITY: PROCEEDINGS OF A SEMINAR HELD AT CINCINNATI, OHIO ON MAY 16-17, 1984.

DESCRIPTOR: *CONFERENCE PROCEEDINGS; *DRINKING WATER; *PLUMBING; *WATER DISTRIBUTION; *WATER QUALITY

DESCRIPTIVE NOTE: 202P. PRICE CODE: PC A10/MF A01. ORDER NO.: PB85-191674/WEP

ABSTRACT: THE SEMINAR ON PLUMBING MATERIALS AND WATER QUALITY WAS HELD AT THE ANDREW BREIDENBACH ENVIRONMENTAL RESEARCH CENTER IN CINCINNATI, OHIO ON MAY 16 AND 17, 1984. THE PURPOSE OF THE SEMINAR WAS TO REVIEW DRINKING WATER PROBLEMS RELATED TO PLUMBING MATERIALS AND TO IDENTIFY ALTERNATIVE SOLUTIONS FOR DEALING WITH THESE PROBLEMS. THE PROCEEDINGS ARE A COMPILATION OF SPEAKER'S PAPERS AND PANEL SESSION REPORTS. THE SPEAKER'S TOPICS COVERED: (1) PLUMBING MATERIALS; (2) PLUMBING MATERIALS ON WATER QUALITY, AND (3) IMPACT OF PLASTIC PIPE AND FITTINGS ON WATER QUALITY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012728

PUBLICATION DATE: 84

TITLE: RISK ASSESSMENT AND MANAGEMENT: FRAMEWORK FOR DECISION MAKING.

DESCRIPTOR: *DECISION MAKING; *ENVIRONMENT; *HUMAN HEALTH; *MANAGEMENT; *RISK ASSESSMENT; *RISK MANAGEMENT

DESCRIPTIVE NOTE: 38P. PRICE CODE: PC A03/MF A01. ORDER NO.: PB85-170157/WEP

ABSTRACT: THE RISK ASSESSMENT AND RISK MANAGEMENT INTIATIVES DESCRIBED IN THIS REPORT ARE TOOLS WHICH WILL HELP MAKE POSSIBLE MORE EFFICIENT PROTECTION OF THE ENVIRONMENT AND HUMAN HEALTH. THE AUTHORS EXPECT TO GAIN SEVERAL SPECIFIC MANAGEMENT ADVANTAGES. ADVANTAGES THEY BELIEVE SHOULD RESULT FROM USE OF THESE PROCEDURES ARE DESCRIBED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012730

PUBLICATION DATE: 84

TITLE: SAFETY IN THE USE OF ASBESTOS: AN ILO (INTERNATIONAL LABOUR OFFICE) CODE OF PRACTICE.

DESCRIPTOR: *ASBESTOS; *GUIDELINES; *HEALTH; *MONITORING; *OCCUPATIONAL SAFETY; *SAFETY

DESCRIPTIVE NOTE: 129P. ORDER NO.: PB85-219418/WEP. PRICE: PC$10.00

ABSTRACT: IN RECENT YEARS THERE HAS BEEN A GROWING AWARENESS THAT EXPOSURE TO ASBESTOS DUST CAN HAVE HARMFUL EFFECTS ON THE HEALTH OF WORKERS. AMONG THE SUBJECTS ON WHICH GENERAL GUIDANCE IS GIVEN IN THE FIRST PART OF THE CODE ARE MONITORING AT THE WORKPLACE, PREVENTIVE MEASURES, THE PROTECTION AND SUPERVISION OF THE HEALTH OF WORKERS, AND THE PACKAGING, HANDLING, TRANSPORT AND DISPOSAL OF ASBESTOS WASTE. MORE DETAILED GUIDANCE ON THE LIMITATION OF EXPOSURE TO ASBESTOS IN SPECIFIC ACTIVITIES IS GIVEN IN THE SECOND PART OF THE CODE, WHICH INCLUDES SECTIONS ON MINING AND MILLING, ASBESTOS CEMENT, TEXTILES, FRICTION MATERIALS AND THE REMOVAL OF ASBESTOS-CONTAINING MATERIALS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012731

PUBLICATION DATE: 84

TITLE: SALTWATER WETLANDS FOR WASTEWATER MANAGEMENT ENVIRONMENTAL ASSESSMENT.

DESCRIPTOR: *DECISION MAKING; *ASSESSMENT; *ENVIRONMENTAL IMPACT; *MANAGEMENT; *RESEARCH NEEDS; *SALTWATER; *WASTE DISPOSAL; *WASTEWATER TREATMENT; *WETLANDS

DESCRIPTIVE NOTE: 322P. PRICE CODE: PC A14/MF A01. ORDER NO.: PB85-201267/WEP

ABSTRACT: SALTWATER WETLANDS HAVE THE POTENTIAL FOR USE AS MUNICIPAL AND SEAFOOD PROCESSING WASTEWATER-DISCHARGE SITES. HOWEVER, THE POTENTIAL ALSO EXISTS FOR ADVERSELY IMPACTING THESE IMPORTANT NATURAL RESOURCES. THE SALTWATER WETLANDS FOR WASTEWATER MANAGEMENT ENVIRONMENTAL ASSESSMENT IS DESIGNED TO EXPLORE THE FEASIBILITY OF USING SALTWATER WETLANDS FOR MUNICIPAL AND SEAFOOD PROCESSING WASTEWATER

MANAGEMENT DECISIONS AFFECTING SALTWATER WETLANDS IN THE SOUTHEASTERN UNITED STATES. THE EMPHASIS OF THIS SALTWATER WETLANDS ENVIRONMENTAL ASSESSMENT IS TO PROVIDE A DESCRIPTION OF KEY SALTWATER WETLAND FACTORS, DISPOSAL PRACTICES AND OPTIONS, REGULATORY CONSIDERATIONS FOR DISPOSAL IMPLEMENTATION, AND AREAS WHERE ADDITIONAL WETLAND RESEARCH IS NEEDED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012733

PUBLICATION DATE: 84

TITLE: SECTION 402 HANDBOOK: GUIDELINES FOR SCREENING NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS.

PERSONAL AUTHOR: TAIT, H. D.

DESCRIPTOR: *CASE STUDIES; *GUIDELINES; *HANDBOOKS; *NPDES; *PERMITS; *PERMIT REVIEW; *WATER POLLUTION CONTROL

DESCRIPTIVE NOTE: 369P. PRICE CODE: PC A16/MF A01. ORDER NO.: PB85-171478/WEP

ABSTRACT: THIS HANDBOOK IS DESIGNED PRIMARILY FOR USE BY FISH AND WILDLIFE SERVICE FIELD OFFICE PERSONNEL IN THE REVIEW OF NPDES SECTION 402 PERMITS. IT INCLUDES A STRATEGY FOR BECOMING FAMILIAR WITH THE CLEAN WATER ACT, ENVIRONMENTAL PROTECTION AGENCY REGULATIONS, AND THE SCIENTIFIC LITERATURE OF THE WATER POLLUTION CONTROL FIELD. WATER QUALITY CRITERIA ARE PRESENTED IN SUMMARY TABLES FOR QUICK REFERENCE. CRITERIA ARE OFFERED FOR SELECTING PRIORITY PERMITS FOR REVIEW BY THE FISH AND WILDLIFE SERVICE. SOURCES OF INFORMATION AND TECHNICAL ASSISTANCE ARE LISTED AND AN ANNOTATED BIBLIOGRAPHY IS INCLUDED ALONG WITH DIRECTORIES OF STATE AND EPA OFFICE. CASE STUDIES OF FISH AND WILDLIFE SERVICE PARTICIPATION IN NPDES PERMIT DECISIONS ARE PRESENTED.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012736

PUBLICATION DATE: 85

TITLE: SLOW SAND FILTER MAINTENANCE COSTS AND EFFECTS ON WATER QUALITY.

PERSONAL AUTHOR: LETTERMAN, R. D.; CULLEN, T. R.

DESCRIPTOR: *COSTS; *FILTERS; *FILTRATION; *MAINTENANCE; *OPERATIONS (WATER); *SAND FILTERS; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 125P. PRICE CODE: PC A06/MF A01. ORDER NO.: PB85-199669/WEP

ABSTRACT: A STUDY WAS CONDUCTED TO DETERMINE HOW SLOW SAND FILTER EFFLUENT QUALITY IS AFFECTED BY SCRAPING AND TO QUANTIFY THE LABOR REQUIRED TO OPERATE AND MAINTAIN A SLOW SAND FILTER. THE DATA WERE OBTAINED BY MONITORING SCRAPING AND OTHER MAINTENANCE OPERATIONS AT SIX FILL-SIZE SLOW SAND FILTRATION PLANTS IN CENTRAL NEW YORK. THE TIME REQUIRED FOR FILTRATE QUALITY TO IMPROVE AFTER FILTER SCRAPING VARIED FROM 6HR TO 2 WEEKS AT THE SLOW SAND FILTRATION PLANTS VISITED. IN FOUR OF TEN MAINTENANCE OPERATIONS SOME QUALITY DETERIORATION OCCURRED. THE NATURE OF THE PARTICULATE MATTER IN RAW WATER APPARENTLY HAS AN IMPORTANT EFFECT ON FILTRATE QUALITY, AND A PILOT PLANT STUDY SHOULD ALWAYS BE CONDUCTED BEFORE A SLOW SAND FILTRATION PLANT IS CONSTRUCTED. CONTINUOUS MONITORING OF THE TURBIDITY OF EACH FILTER EFFLUENT MAY BE NEEDED TO DETERMINE IF FILTER MAINTENANCE OPERATIONS HAVE A DETRIMENTAL EFFECT ON TREATED WATER QUALITY.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012742

PUBLICATION DATE: 85

TITLE: SUMMARY OF WATERBORNE ILLNESS TRANSMITTED THROUGH CONTAMINATED GROUNDWATER.

PERSONAL AUTHOR: CRAUN, G. F.

DESCRIPTOR: *CONTAMINATION; *DRINKING WATER; *DISEASES; *GROUNDWATER; *HEALTH; *PUBLIC HEALTH; *WATER SUPPLY; *WATER QUALITY

DESCRIPTIVE NOTE: 31P. PRICE CODE: PC A03/MF A01. ORDER NO.: PB85-176857/WEP

ABSTRACT: THE USE OF CONTAMINATED, UNTREATED OR INADEQUATELY TREATED GROUNDWATER WAS RESPONSIBLE FOR 51 PERCENT OF ALL WATERBORNE OUTBREAKS AND 40 PERCENT OF ALL WATERBORNE ILLNESS REPORTED IN THE UNITED STATES DURING THE PERIOD 1971-82. CONTAMINATED, UNTREATED OR INADEQUATELY DISINFECTED GROUNDWATER CAUSED 65 PERCENT OF THE WATERBORNE OUTBREAKS AND 66 PERCENT OF THE WATERBORNE ILLNESS WHICH OCCURRED IN NONCOMMUNITY AND INDIVIDUAL WATER SYSTEMS BUT ONLY 32 PERCENT OF THE OUTBREAKS AND 31 PERCENT OF ILLNESS IN COMMUNITY WATER SYSTEMS. ILLNESSES MOST FREQUENTLY TRANSMITTED THROUGH GROUNDWATER INCLUDED ACUTE GASTROENTERITIS OF UNDETERMINED ETIOLOGY, CHEMICAL POISONINGS, HEPATITIS A, SHIGELLOSIS, AND VIRAL GASTROENTERITIS. WATERBORNE OUTBREAKS IN WATER SYSTEMS USING UNTREATED WELL WATER WERE CAUSED PRIMARILY BY THE OVERFLOW OR SEEPAGE OF SEWAGE FROM SEPTIC TANKS OR CESSPOOLS, CHEMICAL CONTAMINATION, AND SURFACE RUNOFF CONTAMINATION. AN INCREASE IN THE NUMBER OF OUTBREAKS RESULTING FROM THE USE OF UNTREATED, CONTAMINATED GROUNDWATER WAS NOTED DURING THE SUMMER MONTHS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012759

PUBLICATION DATE: 85

TITLE: WATER CHEMISTRY AND CARDIOVASCULAR DISEASE RISK.

PERSONAL AUTHOR: WATSON, A. P.; ZEIGHAMI, E. A.

DESCRIPTOR: *CARDIOVASCULAR DISEASE; *CHEMISTRY; *DIET; *DISEASE; *HEALTH; *NUTRITION; *PUBLIC HEALTH; *RISK ASSESSMENT; *WATER; *WATER TREATMENT; *WATER QUALITY

DESCRIPTIVE NOTE: 108P. PRICE CODE: PC A06/MF A01. ORDER NO.: DE85006364/WEP

ABSTRACT: THE EVIDENCE LINKING CARDIOVASCULAR DISEASE RISK AND WATER QUALITY PARAMETERS WAS WEIGHED AND ANALYZED TO IDENTIFY MAJOR GAPS IN UNDERSTANDING REASONS FOR THE REGIONAL DIFFERENCES IN CARDIOVASCULAR DISEASE MORTALITY IN THE UNITED STATES. EPIDEMIOLOGIC STUDIES EVALUATING OCCUPATIONAL AND PUBLIC HEALTH EXPOSURE TO NITRATES, CARBON MONOXIDE, CARBON DISULFIDE, FIBROGENIC DUSTS, HEAVY METALS AND TRACE ELEMENTS, CHLORIDES, AND HYDRO- AND FLUROCARBONS WERE ANALYZED. INTAKE OF CHOLESTEROL, CALCIUM, AND MAGNESIUM FROM FOOD ITEMS, COOKING WATER ENHANCEMENT, AND DRINKING WATER WERE ALSO APPRAISED. BASED ON THE CURRENT STATE OF KNOWLEDGE, IT IS OUR JUDGMENT THAT THE DRINKING WATER CHARACTERISTICS OF HIGHEST PRIORITY FROM THE STANDPOINT OF CARDIOVASCULAR DISEASE RISKS ARE CALCIUM/MAGNESIUM CONTENT AND CHLORINE TREATMENT. THE POTENTIAL IMPORTANCE OF CADMIUM, LEAD, NITRATE(S), AND CHLORIDE/SODIUM CONCENTRATIONS ALSO NEEDS TO BE CONSIDERED. WE PRESENT WORKING HYPOTHESES TO EVALUATE THE ROLE(S) OF THESE PARAMETERS AND A DISCUSSION OF VARIABLES THAT SHOULD BE CONSIDERED IN ANY STUDY DESIGN ADDRESSING THE ASSOCIATION BETWEEN CARDIOVASCULAR DISEASE RISK AND WATER QUALITY. IMPORTANT VARIABLES ARE SAMPLE SIZE, BIOLOGICAL ENDPOINT EVENTS (MORTALITY, INCIDENCE, CLINICAL DETERMINATION), POPLUATION CHARACTERISTICS, DRINKING WATER PARAMETERS, AND DIETARY INTAKE ESTIMATES. 207 REFERENCES, 6 FIGURES, 17 TABLES. (ERA CITATION 10:014812)

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012761

PUBLICATION DATE: 84

TITLE: WATER MANAGEMENT SIMULATOR PRESENTATIONS.

PERSONAL AUTHOR: MACK, L. E.

DESCRIPTOR: *INDUSTRIAL MATERIALS; *MANAGEMENT; *POSTSECONDARY EDUCATION; *SIMULATIONS; *WATER RESOURCES; *WATER SUPPLY; *WATER USE

DESCRIPTIVE NOTE: 14P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB85-211803/WEP

ABSTRACT: ONE OF THE LARGER STUMBLING BLOCKS TO COMPREHENSIVE WATER MANAGEMENT IS THE LACK OF PUBLIC UNDERSTANDING OF THE MULTITUDE OF VARIABLES THAT OPERATE AT THE SAME TIME WITHIN THE HYDROLOGIC CYCLE. WITH MORE PUBLIC UNDERSTANDING, THERE IS GREATER PUBLIC SUPPORT FOR VARIOUS WATER PROJECTS. DR. JOHN R. AMEND, MONTANA STATE UNIVERSITY, DEVELOPED A WATER MANAGEMENT SIMULATOR WHICH COULD HANDLE A LARGE NUMBER OF VARIABLES SIMULTANEOUSLY OF NATURAL SURFACE AND GROUNDWATER FLOW PLUS A NUMBER OF WATER-USE VARIABLES ON AN ACCELERATED TIME SEQUENCE. THE PURPOSE OF THIS INFORMATION TRANSFER PROJECT WAS TO DEMONSTRATE THE USE OF THE WATER MANAGEMENT SIMULATOR AND TO BEGIN TO DEVELOP EXPERIENCED TEAMS OF PEOPLE FROM GOVERNMENT AGENCIES AND ACADEMIA TO EXPLAIN ITS OPERATION TO LOCAL PROFESSIONAL AND CIVIC GROUPS.

AVAILABILITY: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 PORT ROYAL ROAD, SPRINGFIELD, VA 22161

IRIS ACCESSION NUMBER: EW012762

PUBLICATION DATE: 84

TITLE: WATER PURIFICATION AND WASTEWATER TREATMENT WITH SODIUM ALUMINATE.

PERSONAL AUTHOR: LAVER, W.; AND WANG, L. K.

DESCRIPTOR: *OPERATIONS (WATER); *OPERATIONS (WASTEWATER); *PHOSPHORUS; *SODIUM ALUMINATE; *WATER TREATMENT; *WASTEWATER TREATMENT

DESCRIPTIVE NOTE: 22P. PRICE CODE: PC A02/MF A01. ORDER NO.: PB85-214492/WEP

ABSTRACT: TWO TECHNICAL PAPERS ARE PRESENTED: (A) PHOSPHORUS REMOVAL AT WASTEWATER TREATMENT PLANTS; (B) SODIUM ALUMINATE-A NEW LOOK AT AN OLD CHEMICAL. BOTH PAPERS SHOW THAT SODIUM ALUMINATE IS AN EXCELLENT CHEMICAL FOR WATER AND WASTEWATER TREATMENT. ITS CHEMICAL REACTIONS, FEEDING LOCATIONS, DOSAGE DETERMINATION, LABORATORY PROCEDURES, AND VARIOUS APPLICATIONS ARE INTRODUCED.

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IRIS ACCESSION NUMBER: EW012764

PUBLICATION DATE: 84

TITLE: WORKSHOP ON PROBLEM AREAS ASSOCIATED WITH DEVELOPING CARCINOGEN GUIDELINES.

DESCRIPTOR: ABSTRACTS; *CARCINOGENS; *GUIDELINES; *ISSUES; *PAPERS; *REGULATIONS; *RISK ASSESSMENT; *WORKSHOPS

DESCRIPTIVE NOTE: 220P. PRICE CODE: PC A11/MF A01. ORDER NO.: DE85005652/WEP

ABSTRACT: A WORKSHOP WAS CONDUCTED TO DISCUSS PROBLEM AREAS ASSOCIATED WITH DEVELOPING CARCINOGEN GUIDELINES. SESSION TOPICS INCLUDED (1) DEFINITION OF A CARCINOGEN FOR REGULATORY PURPOSES; (2) POTENCY; (3) RISK ASSESSMENT; (4)

UNCERTAINITIES; (5) DE MINIMIS QUANTITY; AND (6) LEGAL AND REGULATORY ISSUES. SEPARATE ABSTRACTS HAVE BEEN PREPARED FOR INDIVIDUAL PAPERS. (ERA CITATION 10:014789)

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*DRAW	(1)	EW012563
*DRILLING	(1)	EW012467

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ECOLOGY (1) EW012675
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*EDUCATIONAL PROGRAMS (1) EW012491
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*EFFLUENT REUSE (1) EW012493
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*ELECTRIC POWER PLANTS (1) EW012573
*EMERGENCY RESPONSE (2) EW012584 EW012585
EMERGENCY RESPONSE (1) EW012586
*EMISSIONS (1) EW012536
*ENERGY (2) EW012470 EW012643
*ENERGY AUDITS (1) EW012646
*ENERGY CONSERVATION (1) EW012646
*ENERGY GENERATION (1) EW012293
*ENERGY RECOVERY (1) EW012293
*ENERGY USE (1) EW012293
*ENFORCEMENT (1) EW012469
ENFORCEMENT (2) EW012528 EW012561
*ENFORCEMENT PROCEDURES (1) EW012469
ENGINEERING (1) EW012509
*ENGINEERING TECHNIQUES (2) EW012703 EW012704
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*ENVIRONMENTAL CHANGE (1) EW012568
*ENVIRONMENTAL EFFECTS (2) EW012658 EW012708
ENVIRONMENTAL EFFECTS (1) EW012675

*ENVIRONMENTAL IMPACT (4) EW012166 EW012568 EW012671 EW012731
*ENVIRONMENTAL ISSUES (1) EW012512

*ENVIRONMENTAL QUALITY (1) EW012663

*EPA METHODS MANUALS (1) EW012535

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*EQUIPMENT IDENTIFICATION (1) EW012635

*ETCHING SOLUTIONS (1) EW012537

ETHYLENE GLYCOL (1) EW012529

*EUTROPHICATION (1) EW012676

*EVALUATION SYSTEMS (1) EW012696

*EXTREME POLLUTANT VALUES (1) EW012539

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*FARM WASTES (1) EW012651

FEDERAL GOVERNMENT (1) EW012692

FEDERAL PROGRAMS (1) EW012160

*FEDERAL REGISTER (1) EW012676

*FEDERAL REGULATIONS (2) EW012159 EW012538

*FEDERAL REPUBLIC OF GERMANY (1) EW012532

*FEDERAL ROLE (3) EW012336 EW012500 EW012618

*FENARIMOL (1) EW012669

*FERRIC CHLORIDE (1) EW012537

*FERTILIZER (2) EW012556 EW012709

FERTILIZERS (1) EW012298

*FIELD STUDIES (1) EW012478

*FIELD TECHNIQUES (1) EW012700

*FILTERS (2) EW012558 EW012736

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FILTRATION (1) EW012570

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*FISHERIES	(2)	EW012679 EW012680
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*FLOCCULATION	(1)	EW012617
*FLORIDA	(1)	EW012543
*FLOW MODELS	(1)	EW012294
*FLOW PROTECTION	(1)	EW012596
*FORESTRY	(1)	EW012556
*FORMALDEHYDE	(1)	EW012678
*FORMULATION	(1)	EW012652
*FULVIC ACID	(1)	EW012610
*FUNDING	(1)	EW012161
*FUNDING SOURCES	(2)	EW012703 EW012706
*GASES	(1)	EW012554
GERMANY	(1)	EW012532
*GIARDIA	(3)	EW012574 EW012609 EW012677
GIARDIA	(1)	EW012667
*GIARDIA CYSTS	(1)	EW012667
*GRANT ADMINISTRATION	(1)	EW012158
*GRANULAR ACTIVATED CARBON	(1)	EW012608
*GROUNDWATER	(16)	EW012272 EW012490 EW012523 EW012524 EW012525 EW012526 EW012528 EW012535 EW012541 EW012578 EW012598 EW012599 EW012610 EW012665 EW012695 EW012742
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*GUIDES	(3)	EW012160 EW012380 EW012523
GUIDES	(1)	EW012559
*HANDBOOKS	(3)	EW012165 EW012336 EW012733
*HASTE	(1)	EW012584
*HAWAII	(1)	EW012594
*HAZARD ASSESSMENT SYSTEM FOR TOXIC EMISSIONS	(1)	EW012584

*HAZARD DETERMINATION	(1)	EW012587
*HAZARDOUS MATERIALS	(8)	EW012205 EW012496 EW012585 EW012586 EW012587 EW012588 EW012699 EW012707
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*HAZARDOUS WASTES	(8)	EW012524 EW012532 EW012534 EW012538 EW012618 EW012673 EW012702 EW012707
HAZARDOUS WASTES	(1)	EW012526
*HAZARDOUS WASTE SOURCES	(1)	EW012707
*HEALTH	(4)	EW012511 EW012730 EW012742 EW012759
*HEALTH EFFECTS	(5)	EW012494 EW012655 EW012656 EW012657 EW012678
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*HEAT TREATMENT	(1)	EW012162
*HEAVY METALS	(1)	EW012297
HOT WATER	(1)	EW012529
*HUMAN HEALTH	(1)	EW012728
*HUMIC AIDS	(1)	EW012607
*HYDRAULICS	(2)	EW012562 EW012627
*HYDROGEOLOGISTS	(1)	EW012467
IDENTIFICATION	(1)	EW012667
*ILLINOIS	(2)	EW012665 EW012670
*IMMUNOFLUORESCENCE	(1)	EW012667
*IMPLEMENTATION	(2)	EW012557 EW012560
*IMPOUNDMENTS	(1)	EW012536
*INCINERATION	(1)	EW012532
*INCINERATORS	(1)	EW012533
*INCOME GENERATION	(1)	EW012470
*INDEXES	(1)	EW012559
*INDUSTRIAL EFFLUENTS	(2)	EW012668 EW012669
*INDUSTRIAL MATERIALS	(1)	EW012761
*INDUSTRIAL REUSE	(5)	EW012569 EW012570 EW012571 EW012572 EW012573
*INDUSTRIAL WASTES	(16)	EW012469 EW012520 EW012521 EW012534 EW012537 EW012570 EW012571 EW012572 EW012580 EW012582 EW012648 EW012649 EW012651 EW012669 EW012707 EW012700
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*INFLOW	(1)	EW012555
*INFORMATION NEEDS	(1)	EW012663
*INFORMATION RESOURCES	(1)	EW012559
*INFORMATION SOURCES	(2)	EW012602 EW012663
*INFORMATION SYSTEMS	(3)	EW012509 EW012585 EW012659
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*INNOVATIONS	(1)	EW012157
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*INSTRUMENTATION	(2)	EW012483 EW012503
*INSTRUMENTS	(2)	EW012165 EW012498
INSTRUMENTS	(1)	EW012523
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INVENTORIES	(1)	EW012638
*INVOLVEMENT	(1)	EW012475
*ION CHROMATOGRAPHY	(1)	EW012563
*IRRIGATION	(1)	EW012490
*ISSUES	(1)	EW012764
KANSAS	(1)	EW012589
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*LABORATORY STUDIES	(1)	EW012300
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*LAKE PROTECTION	(1)	EW012622
*LAKES	(2)	EW012592 EW012622
*LAND APPLICATION	(6)	EW012163 EW012164 EW012298 EW012470 EW012556 EW012623

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*LAND DISPOSAL (1) EW012298
*LANDFILLS (1) EW012541
*LAND POLLUTION CONTROL (1) EW012585
*LAND USE (2) EW012478 EW012512
LAND USE (1) EW012160
*LAUNDRIES (1) EW012571
*LAWS (1) EW012557
*LEARNING (4) EW012386 EW012387 EW012389 EW012390
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*LIME SOFTENING (1) EW012610
*LIQUIDS (1) EW012554
*LIQUID WASTES (1) EW012644
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LOCAL GOVERNMENT (1) EW012692
*LOCAL GOVERNMENTS (1) EW012618
*LYSIMETERS (1) EW012524
*MAGNETIC TAPES (2) EW012502 EW012575
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*MANHOLES (1) EW012629
*MANUALS (3) EW012560 EW012561 EW012695

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*MARINE POLLUTION (1) EW012661

*MASSACHUSETTS (1) EW012469

MATHEMATICAL MODELING (1) EW012675

*MBTS (1) EW012668

*MEASUREMENT (4) EW012296 EW012499 EW012539 EW012540

*MEASUREMENTS (1) EW012661

*MEASUREMENT TECHNIQUES (1) EW012514

*MEMBRANE FOULING (1) EW012607

*MEMBRANES (1) EW012534

*METAL LEACHING (1) EW012654

*METAL RECOVERY (1) EW012654

*METAL REMOVAL (1) EW012297

*METALS (3) EW012166 EW012527 EW012537

METALS (2) EW012297 EW012654

*METHANE (1) EW012470

*MICHIGAN (1) EW012604

*MICROBIOLOGY (1) EW012600

MICROBIOLOGY (1) EW012615

*MICROCOMPUTERS (1) EW012380

*MICROORGANISMS (1) EW012662

*MICROPROCESSERS (1) EW012647

*MICROWAVES (3) EW012655 EW012656 EW012657

*MINNESOTA (2) EW012508 EW012528

*MISSOURI (1) EW012580

MISSOURI (1) EW012589

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MODELING (1) EW012653

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MONITORING (1) EW012675
*MONITORING NETWORKS (1) EW012665
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*MOUNTAIN AREAS (4) EW012703 EW012704 EW012705 EW012706
*MULTIPLE USE (1) EW012622
MULTIPLE USE (1) EW012595
*MUNICIPAL EFFLUENTS (1) EW012668
*NATIONAL PRETREATMENT PROGRAM (1) EW012560
*NATURAL RESOURCES (9) EW012488 EW012489 EW012490 EW012559 EW012593 EW012595 EW012597 EW012622 EW012663
NATURAL RESOURCES (1) EW012272
*NATURITE (1) EW012647
*NEEDS ANALYSIS (1) EW012472
*NEEDS ASSESSMENT (1) EW012473
NEEDS ASSESSMENT (1) EW012593
*NEUTRALIZATION (1) EW012537
*NEVADA (1) EW012483
*NEW JERSEY (1) EW012468
*NITROGEN (1) EW012708
*NONVERBAL COMMUNICATION (1) EW012471
*NPDES (2) EW012337 EW012733
*NUCLEAR WASTES (1) EW012709
*NUTRIENTS (1) EW012592
*NUTRITION (1) EW012759
*OBJECTIVES (1) EW012474
*OCCUPATIONAL SAFETY (1) EW012730
*OCEANOGRAPHY (3) EW012650 EW012661 EW012709
*OCEANS (1) EW012709
*ODOR CONTROL (1) EW012543
*ODORS (2) EW012543 EW012604
*OIL SLICKS (1) EW012497
*ONSITE DISPOSAL (1) EW012514
ONSITE DISPOSAL (1) EW012513

*ONSITE WASTEWATER TREATMENT (4) EW012327 EW012335 EW012513 EW012514
*OPEN WATER (1) EW012497

*OPERATING PROCEDURES (1) EW012332

*OPERATIONAL WASTES (1) EW012649

*OPERATIONS (1) EW012524

*OPERATIONS (WASTE DISPOSAL) (1) EW012533

*OPERATIONS (WASTEWATER) (77) EW011975 EW012157 EW012162 EW012163 EW012165 EW012272 EW012292
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OPERATIONS (WATER) (2) EW012495 EW012607

*ORDINANCES (1) EW012528

*OREGON (2) EW012574 EW012620

*ORGANIC CHEMICALS (1) EW012377

*ORGANIC COMPOUNDS (4) EW012532 EW012534 EW012554 EW012608

*ORGANIC CONTAMINANTS (1) EW012480

*ORGANIC POLLUTANTS (1) EW012606

*ORGANIZATIONS (1) EW012692

*OVERLAND FLOW (1) EW012163

*OVERLAND FLOW PROCESS (1) EW012478

*OXIDATION SLUDGE DESTRUCTION (1) EW012639

*OXIDATION SYSTEMS (1) EW012162

*OZONATION (3) EW012604 EW012605 EW012607

*OZONE (4) EW012591 EW012604 EW012608 EW012609

OZONE (1) EW012607

*OZONE REACTORS (1) EW012606

*PACKAGED TREATMENT PLANTS (1) EW012485

*PACKAGE PLANTS (2) EW012513 EW012628

*PAINTING (1) EW012633

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*PAINTS (1) EW012634
*PAPER MILLS (1) EW012572

*PAPERS (1) EW012764

*PARTICLE COUNTING (1) EW012483

*PARTICLE SIZE (1) EW012480

*PCBS (1) EW012532

*PERFORMANCE (1) EW012327

*PERFORMANCE EVALUATION (31) EW012162 EW012164 EW012292 EW012297 EW012297 EW012299 EW012377
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*PERMIT REQUIREMENTS (1) EW012337

*PERMIT REVIEW (1) EW012733

*PERMITS (1) EW012733

PERMITS (1) EW012561

*PERSONNEL (2) EW012474 EW012588

*PESTICIDES (3) EW012205 EW012669 EW012671

*PHASE CONTRAST MICROSCOPY (1) EW012667

*PHOSPHORUS (2) EW012292 EW012762

PHOSPHORUS (1) EW012297

*PHOSPHORUS REMOVAL (2) EW012292 EW012297

*PHOSTRIP (1) EW012292

*PHOTOGRAPHY (2) EW012487 EW012560

*PHYSICAL CONTROL (1) EW012603

*PILOT PLANTS (1) EW012612

*PILOT STUDIES (1) EW012477

*PIPE NETWORKS (1) EW012482

*PIPES (2) EW012381 EW012527

PIPE SELECTION (1) EW012602

*PLANNING (22) EW012156 EW012161 EW012327 EW012335 EW012467 EW012468 EW012469
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PLANNING (3) EW012160 EW012586 EW012595

*PLUMBING (2) EW012527 EW012719

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POLICIES (1) EW012595
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POLLUTION CONTROL (1) EW012651
*POLYMERS (2) EW012617 EW012626
*POSTSECONDARY EDUCATION (2) EW012165 EW012761
*PRECIPITATION (1) EW012527
*PRETREATMENT (6) EW012469 EW012520 EW012521 EW012522 EW012560 EW012561
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*PRIVATIZATION (1) EW012579
*PROCEDURES (4) EW012158 EW012159 EW012336 EW012659
*PROCESS CONTROL (2) EW012581 EW012647
*PROCESS CONTROLS (7) EW012165 EW012476 EW012483 EW012590 EW012591 EW012615 EW012640
*PROCESS EVALUATION (1) EW012479
*PROGRAM APPROVAL (1) EW012561
*PROGRAM DESCRIPTIONS (4) EW012327 EW012469 EW012589 EW012673
PROGRAM DEVELOPMENT (1) EW012560
*PROGRAM EVALUATION (2) EW012625 EW012692
*PROGRAM REVIEWS (1) EW012557
*PROGRAM SUBMISSION (2) EW012560 EW012561
*PROJECT CERTIFICATION (1) EW012555
*PROJECT DESCRIPTIONS (1) EW012493
*PRONAMIDE (1) EW012669
*PROTECTIVE CLOTHING (1) EW012496
*PUBLIC ATTITUDES (1) EW012491
*PUBLIC HEALTH (10) EW012272 EW012490 EW012494 EW012529 EW012530 EW012587 EW012662
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PUBLIC HEALTH (1) EW012298
*PUBLIC PARTICIPATION (1) EW012475
PUBLIC RELATIONS (1) EW012506
*PUBLIC WATER SUPPLIES (1) EW012595
*PUMPING STATIONS (2) EW012468 EW012510
*PUMPS (7) EW012165 EW012482 EW012504 EW012505 EW012510 EW012543 EW012619

*PUMP STATIONS	(1)	EW012543
*PURCHASING	(1)	EW012605
*PURIFICATION PROCESSES	(1)	EW012708
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*RADIOACTIVE WASTES	(1)	EW012709
*RADIUM	(1)	EW012598
*RAPID INFILTRATION	(1)	EW012611
*RCRA	(1)	EW012538
*RECLAIMED WATER	(4)	EW012669 EW012570 EW012571 EW012573
RECLAIMED WATER	(1)	EW012572
*RECOMMENDATIONS	(4)	EW012496 EW012511 EW012512 EW012558
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*RECREATION	(1)	EW012622
*RECYCLING	(13)	EW012470 EW012488 EW012489 EW012490 EW012494 EW012495 EW012556 EW012569 EW012571 EW012572 EW012573 EW012577 EW012620
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REGULATIONS	(2)	EW012570 EW012593
*REGULATORY PROGRAMS	(1)	EW012586
*REMEDIAL ACTIONS	(1)	EW012702
*REPORTING	(5)	EW012332 EW012337 EW012507 EW012521 EW012522
REPORTING	(1)	EW012509
*RESEARCH	(10)	EW012163 EW012164 EW012592 EW012609 EW012610 EW012673 EW012677 EW012679 EW012600 EW012708
RESEARCH	(2)	EW012614 EW012651
*RESEARCH NEEDS	(2)	EW012642 EW012731
*RESEARCH REPORTS	(13)	EW012166 EW012295 EW012298 EW012377 EW012478 EW012494 EW012495 EW012527 EW012531 EW012554 EW012556 EW012562 EW012692
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*RESIDUAL CHLORINE	(1)	EW012296
*RESINS	(1)	EW012652

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*RESOURCE RECOVERY (6) EW012470 EW012488 EW012489 EW012490 EW012643 EW012647

RESOURCE RECOVERY (2) EW012491 EW012493

*REVERSE OSMOSIS (3) EW012495 EW012534 EW012607

*RIPARIAN DOCTRINE (1) EW012597

*RIPARIAN RIGHTS (1) EW012594

*RISK ASSESSMENT (7) EW012569 EW012587 EW012676 EW012699 EW012728 EW012759 EW012764

*RISK MANAGEMENT (1) EW012728

*ROTARY KILNS (1) EW012533

*RURAL AREAS (11) EW012166 EW012160 EW012327 EW012336 EW012527 EW012530 EW012574 EW012703 EW012704 EW012705 EW012706

*SAFETY (6) EW012496 EW012629 EW012630 EW012632 EW012635 EW012730

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*SALTWATER (1) EW012731

*SAMPLING (10) EW011975 EW012296 EW012498 EW012499 EW012511 EW012523 EW012539 EW012540 EW012600 EW012637

SAMPLING (2) EW012526 EW012614

*SAND FILTERS (2) EW012558 EW012736

*SAND FILTRATION (1) EW012677

*SAWS (1) EW012327

*SCIENCES (2) EW012569 EW012576

*SECONDARY EFFLUENT (1) EW012477

*SECTION 301(H) (1) EW012557

*SEDIMENT (1) EW012294

*SEDIMENT TRANSPORT SYSTEMS (1) EW012294

*SEPTIC SYSTEMS (1) EW012160

*SEPTIC TANKS (2) EW012513 EW012514

*SEQUENCING BATCH REACTORS (1) EW012613

*SEWAGE DISPOSAL SYSTEMS (1) EW012514

*SEWAGE SLUDGE (5) EW012166 EW012298 EW012556 EW012620 EW012624

*SEWER OVERFLOW (1) EW012294

*SEWER REHABILITATION (1) EW012555
*SEWERS (10) EW012294 EW012295 EW012381 EW012481 EW012555 EW012621 EW012625 EW012641 EW012642 EW012664
SEWERS (1) EW012160
*SHELF LIFE (1) EW012487
*SHELLFISH (2) EW012679 EW012680
*SHOCK LOADS (1) EW012479
*SHORELINES (1) EW012650
*SIMULATIONS (1) EW012761
*SITE EVALUATION (2) EW012514 EW012702
*SITING (1) EW012512
*SLUDGE (16) EW012157 EW012162 EW012164 EW012166 EW012300 EW012506 EW012556 EW012612 EW012620 EW012623 EW012624 EW012626 EW012639 EW012643 EW012647 EW012660
SLUDGE (1) EW012298
*SLUDGE BULKING (1) EW012590
*SLUDGE COMPOSTING (2) EW012164 EW012506
*SLUDGE CONDITIONING (3) EW012162 EW012626 EW012660
*SLUDGE DIGESTION (1) EW012300
*SLUDGE DISPOSAL (1) EW012623
*SLUDGE DRYING (1) EW012643
*SLUDGE HANDLING (1) EW012626
*SLUDGE STABILITY (1) EW012300
*SLUDGE STABILIZATION (1) EW012377
*SMALL COMMUNITIES (1) EW012160
*SOCIAL SCIENCES (1) EW012559
*SODIUM ALUMINATE (1) EW012762
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*SOFT WATER (1) EW012527
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*SOIL ABSORPTION SYSTEMS (2) EW012299 EW012562
*SOIL INFILTRATION (1) EW012562
*SOILS (2) EW012166 EW012562
*SOLAR PANELS (1) EW012529

*SOLID WASTES (1) EW012538
*SOLVENT RECOVERY (1) EW012582
*SOLVENTS (1) EW012582
*SOLVOPHOBIC THEORY (1) EW012554
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*SPILL CONTROL (1) EW012585
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*SPILLS (1) EW012496
*STANDARDS (1) EW011975
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*STATE ROLE (3) EW012336 EW012500 EW012528
*STATISTICS (3) EW012525 EW012539 EW012540
*STENCILS (1) EW012635
*STORAGE TANKS (1) EW012578
*STORMWATER (4) EW012542 EW012619 EW012664 EW012670
*STORMWATER CONTROL SYSTEMS (1) EW012664
*STREAMFLOW REQUIREMENTS (1) EW012596
*STREAM PROTECTION (1) EW012596
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*SURFACE IMPOUNDMENTS (1) EW012536
*SURFACE RUNOFF (3) EW012295 EW012619 EW012670
*SURFACE WATER (1) EW012695
*SURFACE WATERS (1) EW012595
*SURVEYS (6) EW012299 EW012596 EW012600 EW012663 EW012692 EW012707
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*SWEDEN (1) EW012708
*TASTE (1) EW012604

*TCMTB (1) EW012668
*TEACHER BEHAVIOR (5) EW012386 EW012387 EW012389 EW012390 EW012471

*TECHNOLOGY (9) EW012156 EW012157 EW012299 EW012557 EW012558 EW012613 EW012639
EW012703 EW012704

*TECHNOLOGY ASSESSMENT (1) EW012292

*TEMPERATURE (1) EW012609

*TEMPERATURE EFFECTS (1) EW012513

*TESTING (1) EW011975

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*TOXICITY TESTS (1) EW012700

*TOXIC SUBSTANCEES (1) EW012500

*TOXIC SUBSTANCES (10) EW012205 EW012479 EW012496 EW012527 EW012584 EW012605 EW012607
EW012659 EW012699 EW012700

*TRAINING (12) EW012386 EW012387 EW012388 EW012389 EW012390 EW012471 EW012472
EW012473 EW012531 EW012563 EW012588 EW012674

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*TRAINING PROGRAMS (4) EW012472 EW012473 EW012588 EW012666

*TRANSPORTATION (1) EW012618

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*TROUBLESHOOTING (1) EW012476

*ULTRAFILTRATION (1) EW012571

*ULTRAPURE WATER (1) EW012570

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*UNDERGROUND TANKS (1) EW012578

*URBAN AREAS (4) EW012295 EW012619 EW012664 EW012670

*USEPA (14) EW012158 EW012159 EW012161 EW012332 EW012336 EW012535 EW012538
EW012555 EW012557 EW012560 EW012561 EW012673 EW012674 EW012695

*USER GUIDES (1) EW012337

*UTILITIES (3) EW012293 EW012573 EW012645

*VADOSE ZONE (1) EW012526

*VALVES (1) EW012165

*VERMONT (1) EW012559

*VIDEODISC RECORDINGS (2) EW012502 EW012575

*VIDEODISCS (1) EW012563
*VOLATILE CHEMICALS (1) EW012536

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*WASHINGTON (1) EW012295

WASHINGTON D.C. (1) EW012647

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*WASTE CONTROL (1) EW012702

*WASTE DISPOSAL (25) EW012164 EW012166 EW012298 EW012377 EW012528 EW012532 EW012533
EW012534 EW012536 EW012537 EW012538 EW012556 EW012618 EW012620 EW012623
EW012624 EW012626 EW012639 EW012639 EW012643 EW012647 EW012651 EW012707
EW012709 EW012731

WASTE DISPOSAL (1) EW012513

*WASTELOAD ALLOCATION (1) EW012674

*WASTE MANAGEMENT (1) EW012293

*WASTETRAX (1) EW012640

*WASTE TREATMENT (3) EW012534 EW012537 EW012651

*WASTEWATER (3) EW012668 EW012669 EW012708

*WASTEWATER COLLECTION (13) EW012156 EW012294 EW012327 EW012381 EW012481 EW012542 EW012543
EW012619 EW012621 EW012625 EW012629 EW012641 EW012642

*WASTEWATER TREATMENT (100) EW011975 EW012156 EW012157 EW012158 EW012159 EW012160 EW012162
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WASTEWATER TREATMENT (2) EW012298 EW012626

*WATER (1) EW012769

WATER (1) EW012559

*WATER CONSERVATION (2) EW012577 EW012602

*WATER DEMAND (1) EW012593

*WATER DISTRIBUTION (6) EW012381 EW012466 EW012468 EW012509 EW012602 EW012719

*WATER DISTRIBUTION SYSTEMS (1) EW012600

*WATER PIPES (1) EW012466

*WATER POLLUTION (6) EW012583 EW012650 EW012651 EW012653 EW012658 EW012671

*WATER POLLUTION CONTROL (14) EW012497 EW012528 EW012529 EW012530 EW012541 EW012578 EW012585 EW012592 EW012662 EW012673 EW012675 EW012695 EW012702 EW012733

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*WATER RATES (1) EW012601

WATER RATES (1) EW012492

*WATER RESOURCES (20) EW012272 EW012488 EW012489 EW012490 EW012492 EW012493 EW012510 EW012559 EW012568 EW012569 EW012577 EW012578 EW012593 EW012594 EW012595 EW012596 EW012597 EW012622 EW012665 EW012761

WATER RESOURCES (6) EW012491 EW012494 EW012571 EW012572 EW012573 EW012666

*WATER REUSE (11) EW012488 EW012489 EW012491 EW012492 EW012493 EW012494 EW012495 EW012569 EW012570 EW012572 EW012573

WATER REUSE (1) EW012571

*WATER RIGHTS (3) EW012594 EW012596 EW012597

*WATER STORAGE (1) EW012468

*WATER SUPPLY (28) EW012293 EW012466 EW012467 EW012468 EW012494 EW012509 EW012510 EW012527 EW012528 EW012529 EW012530 EW012541 EW012569 EW012577 EW012578 EW012593 EW012594 EW012595 EW012596 EW012597 EW012598 EW012599 EW012600 EW012602 EW012603 EW012695 EW012742 EW012761

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*WATER TABLE (1) EW012514

*WATER TANKS (1) EW012468

*WATER TREATMENT (28) EW011975 EW012483 EW012484 EW012485 EW012488 EW012489 EW012490 EW012509 EW012569 EW012574 EW012577 EW012604 EW012605 EW012606 EW012607 EW012608 EW012609 EW012610 EW012617 EW012627 EW012645 EW012652 EW012662 EW012666 EW012677 EW012736 EW012759 EW012762

WATER TREATMENT (4) EW012492 EW012493 EW012494 EW012495

*WATER USE (3) EW012577 EW012596 EW012761

*WATER UTILITIES (1) EW012601

*WATER WELLS (1) EW012467

*WELLS (2) EW012467 EW012599

*WETLANDS (1) EW012731

*WOOLEN MILLS (1) EW012648

*WORD PROCESSING (1) EW012576

*WORKSHOPS	(6)	EW012386	EW012387	EW012388	EW012389	EW012390	EW012764
*WORLD PROBLEMS	(1)	EW012709					